

A STUDY OF THE IMPACT OF CONSUMER PERCEPTION ON THE PURCHASE INTENTION OF NEW ENERGY VEHICLES

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Abstract: With the rapid development of China's economy, the material life of the people in all aspects has been greatly improved. In contrast, the problems of energy consumption and environmental pollution have become more and more prominent. The development of society can not leave the consumption, sustainable development can not leave the green consumption, individual consumption habits and the ecological environment is closely linked. New energy vehicles, as a resource-saving and environmentally friendly emerging products, have the advantages of low energy consumption and light pollution, and are an important representative of green products. However, at present, it seems that the consumer market of new energy vehicles in China is not extremely active, and consumers' enthusiasm for purchasing new energy vehicles is not strong. This study starts from the perspective of consumer perception, constructs the basic model of this study based on technology acceptance theory and value acceptance theory, and investigates the differences in the effects of perceived usefulness, perceived entertainment, perceived cost, and perceived risk on consumers' willingness to purchase new energy vehicles in terms of the dimensions of perceived gain and perceived loss.

The study objectives include: 1. To explore the effect of perceived usefulness on consumers' willingness to purchase new energy vehicles; 2. To explore the effect of perceived entertainment on consumers' willingness to purchase new energy vehicles; 3. To explore the effect of perceived cost on consumers' willingness to purchase new energy vehicles; and 4. To explore the effect of perceived risk on consumers' willingness to purchase new energy vehicles.

This study adopts a quantitative research method, based on Kim's Value-Based Adoption Model, which considers perceived usefulness and perceived enjoyment as two aspects of perceived gains, and perceived costs and perceived risks as two aspects of perceived losses, thereby influencing their decision on whether to purchase. online questionnaires were used to collect data. A total of 560 questionnaires were distributed, and after excluding invalid questionnaires, a total of 514 valid questionnaires were obtained, with an effective recovery rate of 91.79%. The main research conclusions obtained in this study are: 1. The establishment of H1 indicates that consumers buy new energy vehicles not only to obtain internal emotional satisfaction, but also the functional benefits are very important, and the products that satisfy the consumers' usage needs and improve their work efficiency can also

attract a large number of consumers to buy them. 2. The establishment of H2 indicates that the pleasurable feelings and emotional benefits brought by the new energy vehicles to the consumers can stimulate their purchase intention more than the functional utility satisfaction of the products. 3. H3 suggests that the perceived cost can directly or indirectly inhibit the purchase intention through the perceived value. 4. H4 does not hold, which means that consumers may not be fully aware of the potential risk of purchasing a new energy vehicle, and that they are more concerned about the actual cost of the vehicle than the risk of the future.

Keywords: New Energy Vehicles, Purchase Intention, Perceived Usefulness, Perceived Risk

Introduction

China's productivity level has experienced a qualitative leap, the national income level has been raised to a large extent, and people's consumption behavior has gradually increased from material consumption to the level of focusing on the quality of life. In this context, the environmental pollution brought about by the consumption process has become more and more prominent, and the over-exploitation of natural resources has led to serious damage to the environment, and a series of problems such as resource shortages and global warming have become more and more intense. According to statistics, by the end of 2023, China's dependence on foreign oil had reached 72.98%, up 0.53 percentage points from 72.45% in 2022. Among them, the amount of gasoline consumed by automobiles accounts for nearly 90% of the total oil consumption, and the increasing number of automobiles makes China's dependence on oil increasing, making China's energy pressure continue to increase.

As the primary source of urban pollution, automobile exhaust fumes, air pollution, greenhouse effect, and respiratory diseases caused by the extensive use of private cars are also becoming more and more prominent. After a long warm-up period, new energy vehicles have gradually entered the broad automotive market, effectively experiencing the test of consumers. The promotion of new energy vehicles in the market is a long and complicated process, in addition to relying on the promotion of manufacturers and government policy support, the most critical still depends on the consumer's willingness to adopt new energy vehicles.

However, the actual promotion of new energy vehicles in the market is not very satisfactory, and consumers do not know much about new energy vehicles and are not enthusiastic about purchasing them. In view of this, in order to further expand the proportion of new energy vehicles in the automobile market, and to improve consumers' motivation and willingness to buy, it is of great significance to clarify what the core needs of consumers for automobile products are, and how to stimulate consumers' willingness to buy green products. Value acceptance theory shows that consumers buy new products is

a complex value measurement behavior, through the purchase of the product to obtain the comprehensive evaluation of the benefits and costs to make the purchase decision.

Different consumers have different degrees of concern for benefits and risks, and the only way to make a breakthrough in market expansion is to accurately grasp consumers' perceptions and give full play to the environmental qualities of green products. Perceived value theory suggests that perceived value can not only provide motivation for consumers, but also promote their behavior. Perceived value can have an impact on their way of thinking and behavioral patterns.

Therefore, from the perspective of consumer perception, this study combines the unique attributes and purchase scenarios of new energy vehicles, constructs a model of consumer purchase intention based on the value acceptance theory, breaks down the factors related to consumers' perceived gains and perceived loss to explore the relationship between them and their purchase intention, and investigates the effects of these factors on their willingness to purchase new energy vehicles, so as to provide theoretical support for enterprises to carry out green marketing.

In the new energy vehicle market, consumers' willingness to purchase is influenced by a variety of factors. Perceived usefulness relates to consumers' assessment of the performance and efficiency of new energy vehicles, which is directly related to their purchase decision. Entertainment, on the other hand, relates to the level of comfort and driving pleasure provided by the vehicle, and these factors can enhance purchase intentions. Perceived cost includes not only the cost of purchasing the vehicle, but also long-term maintenance and operating costs, which consumers must weigh when considering the purchase of a new energy vehicle. Finally, perceived risks include technical reliability, safety, and future value retention, risk factors that may inhibit purchase intentions. The interaction of these factors constitutes a complex psychological process for consumers to purchase new energy vehicles, and understanding this process is critical to driving market acceptance of new energy vehicles.

Therefore, this study asks the following research problems: 1. Is there an effect of perceived usefulness on consumers' willingness to purchase new energy vehicles; 2. Is there an effect of perceived entertainment on consumers' willingness to purchase new energy vehicles; 3. Is there an effect of perceived cost on consumers' willingness to purchase new energy vehicles; and 4. Is there an effect of perceived risk on consumers' willingness to purchase new energy vehicles. Studying the way in which consumers' perceived usefulness, entertainment, cost and risk affect their purchase intention for new energy vehicles can not only help manufacturers and policy makers to better meet the market demand, but also promote the healthy development of the new energy vehicle industry.

Research Objectives

The purpose of this study is to explore consumers' willingness to purchase new energy vehicles and to analyze the effects of the following four aspects: perceived usefulness, perceived entertainment,

perceived cost, and perceived risk. The study objectives include: 1. To explore the effect of perceived usefulness on consumers' willingness to purchase new energy vehicles; 2. To explore the effect of perceived entertainment on consumers' willingness to purchase new energy vehicles; 3. To explore the effect of perceived cost on consumers' willingness to purchase new energy vehicles; and 4. To explore the effect of perceived risk on consumers' willingness to purchase new energy vehicles.

Literature Review

New energy vehicles

"New Energy Vehicles" (NEVs) refers to automobiles that utilize clean energy to replace fossil fuels, including wind energy, geothermal energy, tidal energy, and hydropower. According to Liu Bowen (2010), New Energy Vehicles refer to vehicles that use new types of fuel rather than primitive fossil fuels, and have different relevant technologies in power driving compared to traditional fuel vehicles. Currently, existing types of New Energy Vehicles in the market include Battery Electric Vehicles (BEV), Hybrid Electric Vehicles (HEV), Plug-in Hybrid Electric Vehicles (REEV), Hydrogen Fuel Cell Vehicles (FCEV), Natural Gas Vehicles (GV), and Biofuel Vehicles (BFV).

Currently, HEVs and BEVs dominate the NEV market due to factors such as technological costs and popularity. While some consumers view NEVs positively, others are hesitant due to various factors, leading to differing opinions on NEV adoption. Chinese consumers primarily recognize BEVs and HEVs. This study focuses on NEVs, encompassing vehicles powered entirely or partially by new energy sources.

Perceived Usefulness

Perceived usefulness, as proposed in the TAM theory, indicates the extent to which users perceive that the use of a certain product or technology enhances their job performance. The more users subjectively recognize a new technological product or service, the more inclined they are to accept it (Davis, 1989). Perceived usefulness, as described in the VAM theory, refers to users' perceived benefits from meeting personal needs, including evaluation of the quality and superiority of products or services (Kim et al., 2007). The connotations of the two are basically the same. In this study, perceived usefulness refers to consumers' perception of utilitarian benefits obtained from purchasing and using green products, including gains in efficiency improvement and need fulfillment.

Perceived Enjoyment

In the value acceptance model, enjoyment is a very important factor. Voss's research suggests that users' product consumption can be summarized into two categories: utilitarian consumption and hedonic consumption. Utilitarian consumption occurs when users purchase and use a product with precise goals in mind, which is task-oriented behavior; whereas hedonic consumption occurs without specific goals, but solely to obtain emotional satisfaction (Voss, et al., 2003). "Perceived enjoyment,"

also known as "perceived pleasure," refers to the intrinsic emotional benefits users obtain from the use of a technology or product, especially the internal and emotional enjoyment that can make individuals feel pleased. This intrinsic enjoyment varies with users' subjective perception, and its impact on users' technology acceptance can be even higher than usefulness (Kim et al., 2007).

Perceived Cost

This article, based on the characteristics of new energy vehicles, analyzes the losses involved in consumers' purchase of new energy vehicles, mainly divided into actual monetary costs and non-monetary costs such as time and convenience costs. Therefore, based on the characteristics and attributes of purchasing new energy vehicles, this article divides perceived loss into perceived cost and perceived risk. Perceived cost refers to the monetary price actually paid by consumers. Perceived cost shows a negative correlation with perceived value, and is usually determined by the negative effects of costs that the product or service brings to consumers. The stronger the negative effects, the greater the negative impact on consumers' perceived value of the product.

Perceived Risk

Perceived risk was first proposed by scholars at Harvard University, and Cunningham (1967) further elaborated on this definition, which gained unanimous recognition from experts and scholars. He proposed that any purchasing behavior of consumers cannot predict whether the results will bring pleasure, but is highly likely to result in dissatisfaction. Therefore, there is relative uncertainty in consumers' purchasing choices, and if individual behaviors fail to achieve the expected goals, perceived risk will arise at any time. Perceived risk corresponds to "technicality" and refers to the time costs, psychological costs, and convenience costs that the use of the product or service occupies for users, also known as users' "non-monetary expenses."

Purchase intention

Purchase intention is a precursor to consumers' actual purchasing behavior, directly reflecting the likelihood of consumers' actual purchase behavior. Therefore, in the fields of consumer psychology and consumer behavior, scholars typically use purchase intention as the dependent variable for research, and extensive research by scholars has led to the gradual maturity of the concept of purchase intention. From 1975 to 1980, Fishbein and Ajzen in a series of studies pointed out that purchase intention refers to the subjective inclination of consumers towards a certain product, which influences their purchasing behavior. Dodds (1991) defined purchase intention as the subjective probability of consumers purchasing a product after understanding its information, and stated that the stronger the purchase intention of consumers, the greater the probability of related consumption behavior occurring. Similarly, Han Rui and Tian Zhilong (2005) considered that the likelihood of consumers choosing to purchase a specific product or service represents their purchase intention. Mullet (1985) pointed out that consumers' purchase intention is the preference for a certain product or service formed under the

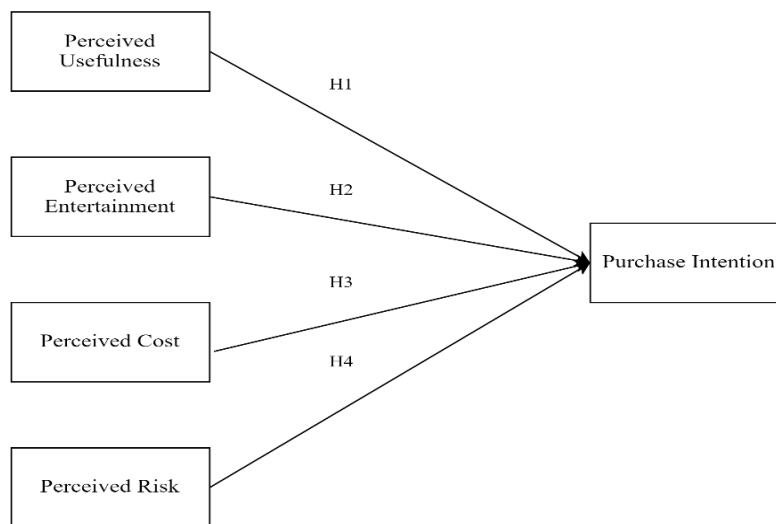
joint influence of internal and external factors. Bagozzi (1989) believed that purchase intention refers to the effort consumers are willing to exert to purchase a certain product or service, which can be expressed as a utility function, and purchase intention plays a decisive role in purchasing behavior.

Technology acceptance model

Davis (1989) proposed the Technology Acceptance Model (TAM), which was first used to predict the behavior of actors in the adoption and use of information systems or information technology. The model includes two main factors, perceived usefulness and perceived ease of use, which can effectively predict consumer behavior. The TAM model suggests that perceived usefulness and perceived ease of use are two important factors that play a role in an individual's behavioral intention. Perceived usefulness refers to the extent to which a product or technology is helpful to the consumer in terms of increasing work efficiency or improving quality of life. Perceived ease of use refers to the consumer's judgment of the ease or complexity of using or manipulating a product or technology. Both are important factors that influence consumers' adoption and willingness to use.

Conceptual Framework

The study aims to explore consumers' willingness to purchase new energy vehicles and to analyze the effects of the following four dimensions: perceived usefulness, perceived entertainment, perceived cost and perceived risk.



Picture 1: Conceptual Framework

Research Hypothesis

- H1: There is a positive correlation between perceived usefulness and purchase intention.
- H2: There is a positive correlation between perceived enjoyment and purchase intention.
- H3: There is a positive correlation between perceived costs and purchase intention.
- H4: There is a positive correlation between perceived risks and purchase intention.

Methodology

This study adopts a quantitative research method, based on Kim's Value-Based Adoption Model, which considers perceived usefulness and perceived enjoyment as two aspects of perceived gains, and perceived costs and perceived risks as two aspects of perceived losses, thereby influencing their decision on whether to purchase.

The survey questionnaire for this study selects new energy vehicles as the research subject for several reasons. Firstly, it allows respondents to develop a clearer and more accurate understanding of green products. Secondly, as a representative green product, new energy vehicles reduce exhaust emissions to a certain extent compared to traditional fuel vehicles, thus aiding in reducing air pollution and alleviating ecological pressures. Thirdly, new energy vehicles are widely recognized among consumer groups, making consumers relatively familiar with them. Fourthly, considering new energy vehicles as high-priced green products, consumers tend to exhibit more rational behavior in their purchasing decisions. Finally, a significant portion of the survey respondents are students, including young adults who have recently entered the workforce, and they have a strong need for vehicle purchases. Cars are precisely the green products they are considering. Therefore, this study chooses new energy vehicles as the subject of the questionnaire. The questionnaire consists of two main sections: demographic information and variable questions. The second section utilizes a Likert 5-point scale for measurement.

In this study, online questionnaires were used to collect data. A total of 560 questionnaires were distributed, and after excluding invalid questionnaires, a total of 514 valid questionnaires were obtained, with an effective recovery rate of 91.79%.

Results

Reliability is an important indicator used to determine the trustworthiness of a scale. To validate whether the measurement scales used in this study accurately reflect the study variables and to examine the accuracy and reliability of the measurement items, this study employs Cronbach's α coefficient to assess the reliability of the scales.

From Table 1 it can be observed that the Cronbach's α values for the three items of the perceived usefulness scale are 0.778, indicating high reliability; for the four items of the perceived enjoyment scale, the Cronbach's α value is 0.842, indicating very high reliability; for the three items of the perceived cost scale, the Cronbach's α value is 0.896, indicating very high reliability; for the six items of the perceived risk scale, the Cronbach's α value is 0.922, indicating very high reliability; and for the four items of the purchase intention scale, the Cronbach's α value is 0.855, indicating very high reliability. It can be concluded that the Cronbach's α values for all variable scales are greater than 0.7, indicating a high level of internal consistency among the measurement items. Therefore, the scales used

in this study demonstrate relatively high reliability.

Table 1: Results of reliability analysis for each variable

Variable	Number of questions	Cronbach 's α
Perceived usefulness	3	0.778
Perceived entertainment	4	0.842
Perceived cost	3	0.896
Perceived risk	6	0.922
Purchase intention	4	0.855

Validity is an important measure used to evaluate whether the measurement results of a scale have good effectiveness. It includes content validity, convergent validity, and discriminant validity. The suitability of data for factor analysis was determined by assessing the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity. The evaluation criteria for the KMO measure are as follows: a KMO value greater than 0.9 indicates excellent suitability; between 0.8 and 0.9 indicates good suitability; between 0.7 and 0.8 indicates fair suitability; between 0.6 and 0.7 indicates mediocre suitability; and less than 0.5 suggests inadequacy for factor analysis. Additionally, the significance level for Bartlett's test of sphericity should be less than 0.05. From Table 2, it can be seen that the KMO value of the data in this study is 0.923 and the Bartlett's test of sphericity significance is less than 0.001, which satisfies the criteria and implies that the data is capable of exploratory factor analysis.

Table 2: Brand awareness KMO and Bartlett's Test^a

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.923
Bartlett's Test of Sphericity	Approx. Chi-Square	4201.265
	df	561
	Sig.	0.000

For convergent validity, this study employed principal component analysis and confirmatory factor analysis to assess the structural validity of the measurement scales by observing the Average Variance Extracted (AVE) and Composite Reliability (CR) values of each variable. For discriminant validity, if the correlation coefficients between each variable and other latent variables are smaller than the square root of its AVE, it indicates good discriminant validity. From Table 3, it can be observed that the AVE values of each variable are greater than 0.5, and the CR values are all greater than 0.8, indicating good convergent validity of the measurement scales used in this study. From Table 4, it can be seen that the square root of the AVE for each variable is greater than the correlation coefficients between itself and other variables, demonstrating good discriminant validity of the measurement scales in this study.

Table 3: Validated factor analysis results for each variable

Variable	No.	Factor Loading (λ)	CR	AVE
Perceived usefulness	PU1	0.794	0.801	0.573
	PU2	0.739		
	PU3	0.736		
Perceived entertainment	PE1	0.708	0.846	0.579
	PE2	0.711		
	PE3	0.801		
	PE4	0.818		
Perceived cost	PF1	0.856	0.897	0.743
	PF2	0.851		
	PF3	0.879		
Perceived risk	PR1	0.836	0.922	0.664
	PR2	0.808		
	PR3	0.832		
	PR4	0.845		
	PR5	0.780		
	PR6	0.786		
Purchase Intention	PI1	0.794	0.859	0.605
	PI2	0.795		
	PI3	0.739		
	PI4	0.781		

Table 4: Results of the discriminant validity test of the scale

	PU	PE	PF	PR	PI
PU	0.757				
PE	0.142***	0.761			
PF	-0.169***	-0.235***	0.862		
PR	-0.163***	-0.197***	0.341***	0.815	
PI	0.171***	0.226***	-0.288***	-0.245***	0.778

Note: Values on the diagonal are the square root of the AVE values for each variable, and below the diagonal are the Pearson correlation coefficients for each variable.

The descriptive statistical analysis of the 514 valid samples selected is presented in Table 5.

Table 5: Descriptive Statistics Analysis of Valid Sample Information

Variable Name	Category	Sample Size	Proportion (%)
Gender	Male	246	47.9
	Female	268	52.1
Age	20 years and under	51	9.9
	21-30 years	175	34
	31-40 years	170	33.1
	41-50 years	99	19.3
	Above 51 years	19	3.7
Education Level	Junior high school and below	4	0.8
	High school or technical secondary school	26	5.1
	College	81	15.8
	Undergraduate	344	66.9

	Master's degree and above	59	11.5
Type of Jobs	Staff of government agencies, institutions and state-owned enterprises	174	33.9
	Private business owners or employees	203	39.5
	Self-employed	52	10.1
	Students	69	13.4
	Others	16	3.1
Average Monthly Income	Below 3,000 yuan	60	11.7
	3001-6000 yuan	125	24.3
	6001-10000 yuan	179	34.8
	10001-15000 yuan	96	18.7
	More than 15,000 yuan	54	10.5
Household Registration	City	385	74.9
	Village	129	25.1
Have you ever purchased a new energy vehicle?	Yes	250	48.6
	No	264	51.4
Number of cars owned	0	55	10.7
	1	401	78
	2	54	10.5
	More	4	0.8
Annual Mileage	Below 15000km	169	32.9
	15000-30000km	233	45.3
	30000-40000km	69	13.4
	More than 40,000km	43	8.4
Understanding of new energy vehicles	Never heard of it	3	0.6
	Only heard of	39	7.6
	Have some understanding	238	46.3
	Comparatively understanding	194	37.7
	Very knowledgeable	40	7.8

Table 6: Results of the discriminant validity test of the scale

	PU	PE	PF	PR	PI
PU	1				
PE	0.448**	1			
PF	-0.313**	-0.377**	1		
PR	-0.434**	-0.462**	0.466**	1	
PI	0.0526**	0.608**	-0.446**	-0.567**	1

Note: *means $p < 0.05$; **means $p < 0.01$

The results of the correlation analysis for the measurement scales are shown in Table 6: Perceived usefulness ($r=0.526$, $p < 0.01$) and perceived enjoyment ($r=0.608$, $p < 0.01$) exhibit significant positive correlations with purchase intention. Conversely, perceived cost ($r=-0.446$, $p < 0.01$) and perceived risk ($r=-0.567$, $p < 0.01$) demonstrate significant negative correlations with purchase intention.

The impact relationships between perceived usefulness, perceived enjoyment, perceived cost, perceived risk, and purchase intention were analyzed using linear regression. The analysis aimed to test whether there were significant causal relationships between the variables, thereby verifying hypotheses

H1, H2, H3, and H4. Table 7 presents the results of the regression analysis for perceived usefulness, perceived enjoyment, perceived cost, perceived risk, and purchase intention.

Table 7: Regression analysis results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.472	0.305		4.823	0.000		
Perceived Usefulness	0.228	0.040	0.199	5.658	0.000	0.716	1.396
Perceived Entertainment	0.288	0.037	0.287	7.686	0.000	0.635	1.576
Perceived Cost	-0.042	0.021	-0.072	-1.988	0.047	0.675	1.481
Perceived Risk	-0.066	0.036	-0.089	-1.836	0.067	0.381	2.627
R	0.742a						
R ²	0.550						
F	124.265				Sig.	0.000b	

From Table 7, it can be observed that the coefficient of determination R² is 0.550, the F value is 124.265, and the significance is 0.000, indicating that the regression relationships between perceived usefulness, perceived enjoyment, perceived cost, perceived risk, and purchase intention are significant, and the model's fitted regression line is meaningful. Additionally, all the VIF values are less than 5, indicating the absence of multicollinearity among the variables.

Furthermore, the t-values for perceived usefulness and perceived enjoyment are 5.658 and 7.686, respectively, with both sig. values less than 0.05. The regression coefficients are positive, indicating that perceived usefulness and perceived enjoyment have a significant positive effect on purchase intention, thus validating hypotheses H1 and H2. The t-value for perceived cost is -1.988, with a sig. value less than 0.05, and the regression coefficient is negative, suggesting a significant negative relationship between perceived cost and purchase intention, thus validating hypothesis H3. The t-value for perceived risk is -1.836, with a sig. value of 0.067, which is greater than 0.05, indicating that there is no significant negative correlation between perceived risk and purchase intention, thus hypothesis H4 is not supported.

Discussion

In this study, perceived benefits are divided into perceived usefulness and perceived enjoyment, representing utilitarian and hedonic benefits, respectively. The results of the analysis show that both perceived usefulness and perceived enjoyment significantly influence consumers' purchase intentions when choosing new energy vehicles. This indicates that both utilitarian and hedonic benefits directly stimulate consumers' purchase intentions.

Perceived usefulness also plays a significant positive role in stimulating purchase intentions.

Consumers buy new energy vehicles not only for emotional satisfaction but also for functional benefits. Products that meet consumers' usage needs and improve work efficiency can attract a large number of consumers to purchase.

Perceived enjoyment has a larger path coefficient on purchase intentions compared to perceived usefulness, indicating that the emotional benefits and pleasure derived from new energy vehicles are more influential than the functional utility in stimulating purchase intentions. Therefore, for manufacturers and sales companies of new energy vehicles to attract consumers, it is crucial to enhance consumers' perceived hedonic benefits of new energy vehicles. Promoting the green attributes and environmental benefits of new energy vehicles can evoke consumers' feelings of pleasure and pride in using them, thereby promoting their purchase behavior.

Conclusions

Perceived loss can negatively impact consumers' purchase motivation, even leading to refusal to purchase. In this study, Perceived loss are divided into perceived costs and perceived risks, including monetary and non-monetary expenditures. The results show:

Perceived costs are significantly negatively correlated with purchase intentions. This means that perceived costs directly or indirectly inhibit purchase intentions, either directly or indirectly through perceived value. Therefore, to reduce consumers' resistance to purchasing new energy vehicles, manufacturers and sales companies need to reduce consumers' perceived costs of purchasing new energy vehicles. This will make consumers of different economic conditions willing to buy new energy vehicles rather than relatively cheaper traditional products.

Perceived risks in this study do not significantly influence purchase intentions. This suggests that consumers may not be fully aware of the potential risks associated with purchasing new energy vehicles. Alternatively, the potential risks associated with purchasing and using new energy vehicles, such as the immature and unstable production technology, are not the main reasons influencing consumers' purchase decisions. Compared to future potential risks, the actual costs incurred are what consumers are more concerned about. Therefore, if companies want to encourage consumers to purchase new energy vehicles, they still need to make efforts to reduce the price and usage costs of new energy vehicles.

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