

Quantitative Policy Evaluation under the Vision of Energy Vehicle Development Strategy

-- Takes Anhui Province as An Example

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Abstract: Advocating by the concept of "double carbon era", China's long-term unremitting efforts for energy conservation and emission reduction. In 2021, the central government clearly mentioned focusing on strategic emerging industries such as new energy vehicles on the 14th Five-Year Plan. First of all, this paper obtains relevant policies, and then establishes policy evaluation indicators from multiple dimensions such as policy nature, timeliness, function and action, so as to build a PMC index model for quantitative evaluation of policy quality and response validity. Secondly, this paper takes Anhui province as the research area and uses the combination of stratified sampling and quota sampling to collect questionnaires. According to the results of the questionnaire survey, the structural equation model was constructed to explore the influence of the new energy vehicle policy on the purchase intention of potential consumers. Finally, the relevant conclusions were obtained through the above analysis, in order to help promote and optimize the strategy of the new energy vehicle nationwide.

Keywords: New energy vehicle development strategy, Policy status quo PMC index structure equation model.

1. Introduction

With the improvement of the level of Chinese residents' consumption level, cars have become an important means of travel. By the end of 2021, the number of cars in China has reached 302 million. While the scale of automobile use is constantly on the rise, oil and other fuels as non-renewable energy sources are gradually scarce. In addition, a large number of cars emit pollutants, leading to environmental pollution and other problems. Due to the characteristics of driving energy and emission, new energy vehicles highly fit the national low-carbon target, and have become the key industry of national strategic development.

At present, the development of the new energy vehicle industry is highly dependent on the macro-control of national policies. Reasonable regulation is of great help to create a fair, open and competitive market environment for new energy vehicles. But China's new energy automobile industry subsidy policy at the present stage the actual effect did not reach the ideal goal, some policy original purpose is to encourage enterprise research and development innovation, thus in the global competitiveness, but blindly promoted the industry scale, enterprise research and development enthusiasm seriously insufficient, "steal" phenomenon occurs.

The new energy vehicle industry in Anhui province started early, and the industrial chain is relatively complete in China. In addition, Anhui province is an important province in the Yangtze River Delta and has certain regional advantages. Therefore, the relevant survey conducted in Anhui province is highly representative. Through the analysis of the measures of Anhui province in the technology conquer, the experience and lessons of Anhui are summarized, will be of great benefit to the development of the domestic automobile market. The article takes Anhui Province as an example to conduct an investigation to explore the current situation of new energy vehicle policies and residents' willingness to buy them. Combined with the policy and the actual feelings of consumers, we analyze how to improve the effectiveness of

policy transmission from many aspects, so as to fundamentally promote the further improvement of the domestic new energy vehicle strategy.

2. Literature Research

2.1. Policy Evaluation and Research of New Energy Vehicles

Gao Wei, Hu Xiaoyue (2020) used the content analysis method and the Bootstrap intermediary effect model to study the effect of the new energy vehicle policy, and found that the subsidy temptation of the new energy vehicle industry makes the phenomenon of subsidy fraud occur from time to time, and the psychology of seeking quick success and instant benefits in enterprise technology research and development also greatly weakened the intermediary effect of the policy. Zhao Citizen, Lv Jingqin et al. (2021) from the national and six central provinces of two levels of new energy vehicle policy as the research object, using the potential Dirichlet distribution model (LDA) analysis, found that China's new energy vehicle policy is weak hierarchical linkage, the transmission and penetration is ignored and other problems. Wang Huifang, Shi Shuling (2021) made a detailed analysis of the current situation of the new energy vehicle policies, and found that the existing new energy vehicle policies are lack of coordination, the relevant supervision is not in place, and the incentive effect is not obvious.

2.2. Market Evaluation and Research of New Energy Vehicles

Yao LAN (2022) pointed out that China's new energy vehicles have still achieved continuous growth under the background of great downward pressure on the production and sales of the automobile industry, believing that China's new energy vehicles are shifting from policy driven to market driven. Chen Liya, Chen Minmin (2021) pointed out that despite the strong development momentum, there are still

many problems in China's new energy vehicles, and believes that the future of new energy vehicles to be lighter, intelligent and technological development. Yang Yi and Li Peng (2022) believe that the scale of China's new energy vehicle consumption market will continue to expand, and they should be committed to gradually weakening the government's support for the new energy vehicle industry, strengthen the research and development of core technologies, and establish a perfect after-sales service system.

2.3. Research on the Purchase Intention of New Energy Vehicles

In the influence factors of buying new energy vehicles willingness research, Xu Xiaohu (2010) through the 4S shop questionnaires and empirical analysis, research found that after-sales service factor, purchase cost factor, car quality factor, the use of energy factors and the surrounding influence factor as the main factors of consumers to buy new energy vehicles decisions. Hu Huiying (2020) established a relevant model according to the 2019 CATARC new energy vehicle satisfaction survey, and found that energy conservation,

environmental protection and low use cost are the two main factors for consumers to buy new energy vehicles, and manufacturers' marketing strategy can be started from the perspective of economic saving and social responsibility. Du Yuwei (2021) studied the impact of the price of new energy vehicles and gasoline prices on the sales volume of new energy vehicles. Using the VAR model, it was concluded that the price of new energy vehicles has an important influence on the sales volume, while there is no regular influence on gasoline prices.

3. Construction of the PMC Index Model

3.1. Selection of Evaluation Objects

This article selects 10 new energy vehicle policies covering the comprehensive and high relevance and representative policies as the evaluation object. The 10 texts include 3 provincial policies and 8 prefecture-level policies. The above 10 policy texts are summarized as follows:

1Table 1. Summary of New energy vehicle policy samples in Anhui Province

order number	Policy name	Send text number	date of issue
1	Notice of Anhui Provincial People's Government on printing and issuing a number of policies supporting the innovative development, promotion and application of the new energy vehicle industry	Wanzheng (2017) No.110	2017-8-25
2	The Implementation Opinions of the General Office of Anhui Provincial People's Government on Accelerating the development and promotion of new energy vehicle industry	Anhui Government Office (2021) No.7	2021-7-19
3	Hefei Municipal People's Government on accelerating the development of new energy vehicle industry implementation opinions	United Political Secretary (2020) No.64	2020-12-18
4	Hefei Municipal People's Government Office issued a number of policies to promote the high-quality development of new energy vehicles to help win the battle of blue sky protection notice	Joint Administration Office (2020) No.7	2020-9-17
5	Fuyang Municipal People's Government notice on the issuance of several policies supporting the innovative development, promotion and application of the new energy vehicle industry	Fu Zhengfa (2017) No.84	2018-1-9
6	Notice of the People's Government of Anqing City on the issuance of several policies to further support the development and promotion and application of the new energy vehicle industry	Appropriate Political Secretary (2019) No.33	2019-4-25
7	The report of the Chaohu Municipal Development and Reform Commission on the implementation of the Opinions of the Standing Committee of the Municipal People's Congress on checking the Implementation of the Regulations on Promoting the Agglomeration and Development of Strategic Emerging Industries in Ande Province> Report		2019-2-15
8	Huangshan Municipal People's Government on the Implementation of Anhui Provincial People's Government Support, Innovation, Development and Promotion of New Energy Vehicles	Huang Zhengcai (2017) No.45	2017-11-1
9	Notice of Bozhou Municipal People's Government on printing and issuing a number of policies supporting the innovation, development, promotion and application of the new energy vehicle industry	Bozhou Political Secretary (2017) No.245	2017-12-5
10	We will further strengthen the implementation rules of technological innovation projects and fund management for the new energy vehicles and intelligent and connected automobile industry	Wanzheng (2017) No.110	2020-10-13

3.2. Policy Model Analysis

First through the content analysis of 10 policy samples, on this basis, with the use of ROSTCM6 text mining tools and content analysis, and combined with the actual situation and characteristics of new energy policy of the input and output table assignment, secondary variables policy text meet the

secondary variables, the secondary variable assignment 1, otherwise assigned 0. Then, the PMC index of the 10 policies is calculated according to the PMC index calculation formula (the calculation results retain two decimal places), and the PMC scores of the 10 policies and the mean value of each index variable are summarized. The summary results are shown in Table 2 below.

2Table 2. Summary of the ten Policy PMC indexes

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	mean
X1	1.00	1.00	0.83	0.50	0.67	0.50	0.67	0.33	0.67	0.33	0.65
X2	0.25	0.25	0.25	0.20	0.25	0.25	0.25	0.25	0.25	0.25	0.25
X3	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
X4	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
X5	0.83	0.83	0.83	0.67	0.83	0.67	0.50	0.83	0.83	0.33	0.72
X6	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	0.67	0.87
X7	1.00	1.00	1.00	0.80	1.00	1.00	0.80	0.80	0.80	0.80	0.90
X8	0.60	1.00	0.40	0.40	0.40	0.40	0.40	0.40	0.60	0.40	0.50
X9	1.00	1.00	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.00	0.83
X10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Q	3.78	3.78	3.61	3.03	3.45	3.28	3.25	2.91	3.25	2.91	3.33
B	3.43	3.83	2.98	2.82	2.98	2.49	2.32	2.65	3.18	2.40	2.91
PMC index number	7.21	7.61	6.59	5.85	6.43	5.77	5.57	5.56	6.43	5.31	6.23
S	2.79	2.39	3.41	4.15	3.57	4.23	4.43	4.44	3.57	4.69	3.77
Policy level ranking	outstanding	outstanding	admissibility	admissibility	admissibility	admissibility	admissibility	admissibility	admissibility	admissibility	
	2	1	3	10	4	6	7	8	4	9	

Note: P1-P10 indicates the 10 policy codes in turn, X1-X10 represents the first-level variable calculation index of the PMC index model, Q represents the policy quality, B represents the response validity, S represents the depression level, and the policy level and ranking are calculated according to the PMC index score.

3.3. PMC Surface Analysis

In order to better clarify the policy optimization strategy of new energy vehicles, the author uses PMC surface for in-depth analysis, and introduces S (depression level) to quantify

the advantages and disadvantages of various policy variables. PMC surface can intuitively reflect the performance of PMC index model in various dimensions, considering that X10 (file reference) only level variables, value is 1, and PMC matrix symmetry and surface balance, so the author will eliminate X10 (policy reference), according to the rest of the policy in the PMC model level variable value, build a third order matrix as shown in Table 19, and draw the PMC surface as shown in Figure 3:

(1) Constructing policy matrices

3Table 3. Ten policy PMC surface construction data

$P1 = \begin{pmatrix} 1.000 & 0.250 & 0.333 \\ 0.200 & 0.833 & 1.000 \\ 1.000 & 0.600 & 1.000 \end{pmatrix}$	$P2 = \begin{pmatrix} 1.000 & 0.250 & 0.333 \\ 0.200 & 0.833 & 1.000 \\ 1.000 & 1.000 & 1.000 \end{pmatrix}$
$P3 = \begin{pmatrix} 0.833 & 0.250 & 0.333 \\ 0.200 & 0.833 & 1.000 \\ 1.000 & 0.400 & 0.750 \end{pmatrix}$	$P4 = \begin{pmatrix} 0.500 & 0.250 & 0.333 \\ 0.200 & 0.667 & 1.000 \\ 0.800 & 0.400 & 0.750 \end{pmatrix}$
$P5 = \begin{pmatrix} 0.677 & 0.250 & 0.333 \\ 0.200 & 0.833 & 1.000 \\ 1.000 & 0.400 & 0.750 \end{pmatrix}$	$P6 = \begin{pmatrix} 0.500 & 0.250 & 0.333 \\ 0.200 & 0.667 & 0.667 \\ 1.000 & 0.400 & 0.750 \end{pmatrix}$
$P7 = \begin{pmatrix} 0.667 & 0.250 & 0.333 \\ 0.200 & 0.500 & 0.667 \\ 0.800 & 0.400 & 0.750 \end{pmatrix}$	$P8 = \begin{pmatrix} 0.333 & 0.250 & 0.333 \\ 0.200 & 0.833 & 0.667 \\ 0.800 & 0.400 & 0.750 \end{pmatrix}$
$P9 = \begin{pmatrix} 0.667 & 0.250 & 0.333 \\ 0.200 & 0.833 & 1.000 \\ 0.800 & 0.600 & 0.750 \end{pmatrix}$	$P10 = \begin{pmatrix} 0.333 & 0.250 & 0.333 \\ 0.200 & 0.333 & 0.667 \\ 0.800 & 0.400 & 1.000 \end{pmatrix}$

(2) The PMC Surface Drawing

In this part, MATLAB data analysis software is used to

draw PMC surfaces, in which the deeper the red color indicates that the higher the score on the variable, the policy content is more scientific, and the deeper the blue color indicates the lower the score on the variable, indicating that the policy content needs to be supplemented.

It can be seen that the 10 policies are generally acceptable level, among which X2 (policy limitation), X3 (policy level), X4 (publishing organization) have obvious depression level; X1 (policy nature), X8 (policy measures) but the overall score is less than 0.7, X5 (policy field), X6 (policy function), X9 (role level) show obvious bulge, close to excellent level; X7 (policy evaluation) tend to be perfect state.

Specifically, 1. Most of the policies are prefecture-level cities, lack of long-term planning for the development of new energy vehicles, focus on short-term plan, policy content prediction is not strong; 2. From X6 (policy function), 60% of the policies in encouraging technological innovation, standard guidance and system constraints, a few policies lack guiding technology innovation content, causing X6 variable policy score fluctuations.3. According to the perfect level index X7 (policy evaluation), the fluctuation range of various policies is not large, and the policies basically meet the requirements of clear objectives, sufficient basis and scientific plan.

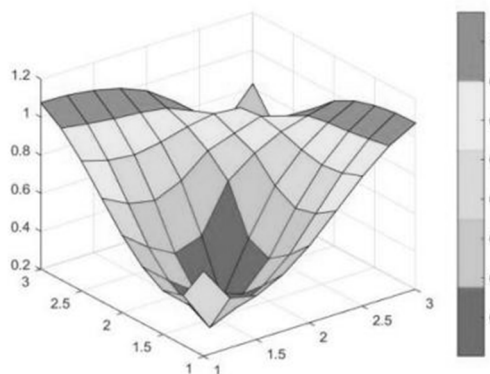
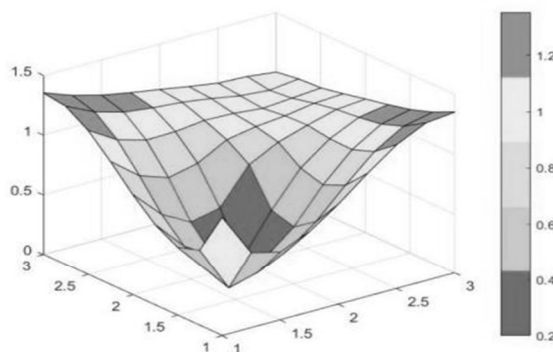
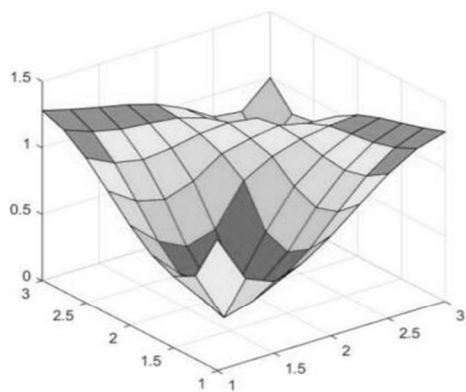
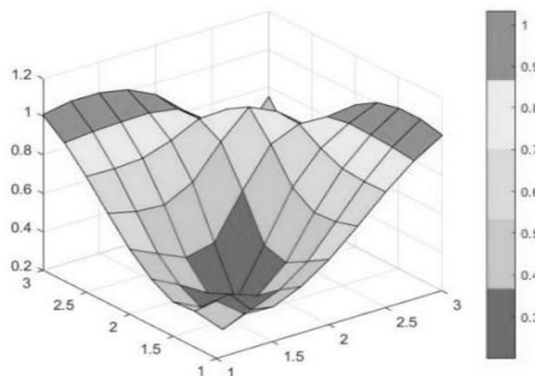
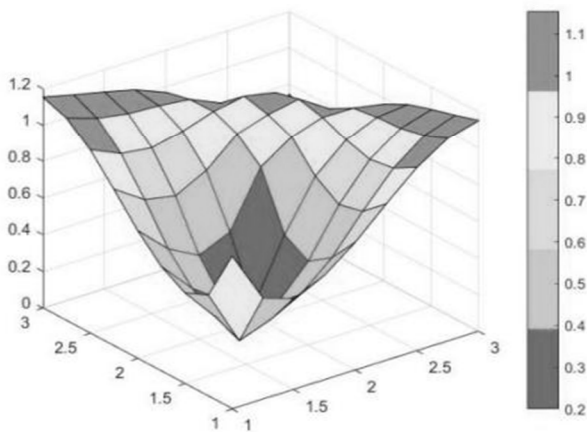


Figure 1. The PMC surfaces for the overall case

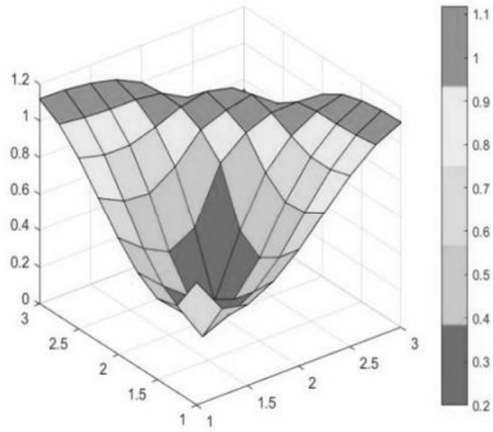


PMC surface diagram of P1 A PMC surface map of P2

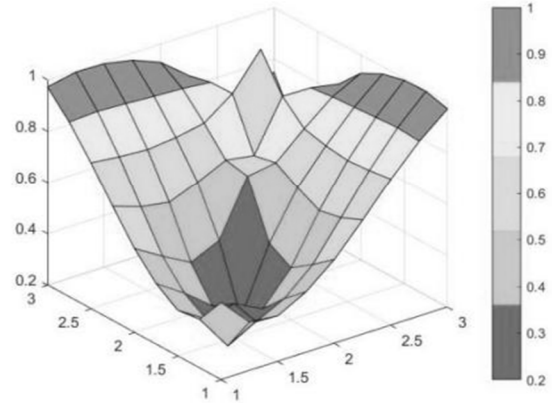


PMC surface for P3

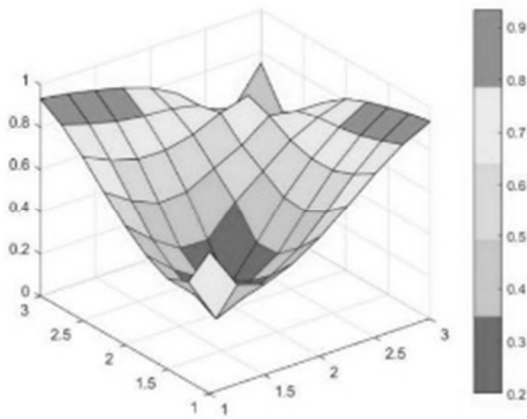
The PMC surface for P4



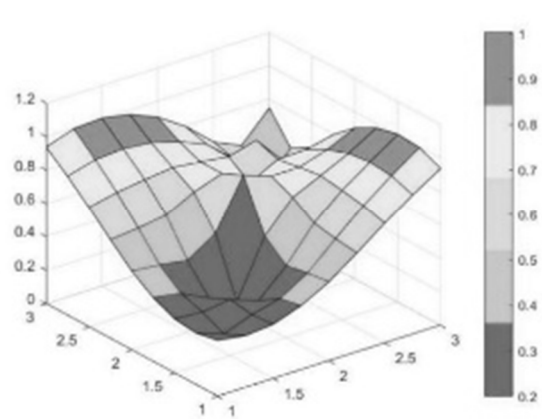
PMC surface for P5



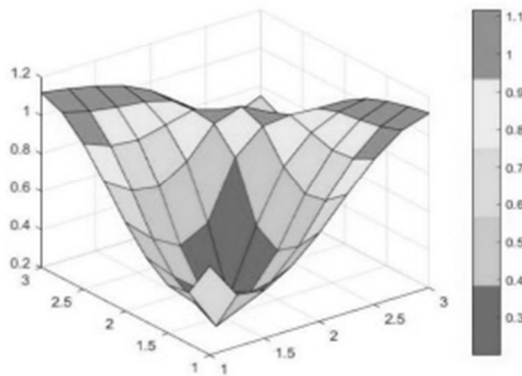
The PMC surface for P6



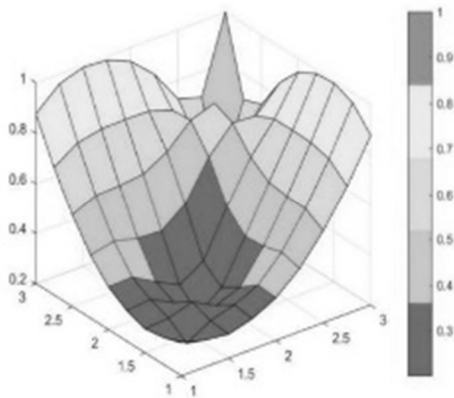
PMC surface for P7



The PMC surface for P8



PMC surface for P9



The PMC surface for P10

Figure 2. The PMC surface of each policy text

4. Explore Consumers' Purchase Intention Based on Structural Equations

In order to check whether there is a significant difference between the mean value and the given constant value, the author used the one-sample t-test to analyze the policy

variables, perception variables and purchase intention variables. First, the data of each variable were fitted to show that the sample basically met the normal distribution conditions. Later, a one-sample t-test was conducted, and Table 4 showed that the P-values were <0.05 , indicating that the respondents had a more positive attitude towards each variable, and the evaluation level was significantly higher than the given constant value 3.

4Table 4. Single Sample Statistics

	The number of cases	average value	standard deviations	Standard error mean value
Mean car purchase policy	539	4.0584	.60242	.02595
Mean of right of way policy	539	4.0722	.64702	.02787
Mean charging policy	539	4.1215	.68818	.02964
Publicity policy mean	539	3.9066	.61422	.02646
Perceived value mean	539	3.9549	.60514	.02607
Perceived the mean risk	539	3.5450	.70773	.03048
Mean consumption willingness	539	3.9903	.64058	.02759

5Table 5. Single-sample test

Inspection value =3						
	t	free degree	Sig.(Double tail)	Mean difference	lower limit	superior limit
Mean car purchase policy	40.791	538	.000	1.05844	1.0075	1.1094
Mean charging policy	37.836	538	.000	1.12152	1.0633	1.1797
Publicity policy mean	34.269	538	.000	.90662	.8546	.9586
Perceived value mean	36.633	538	.000	.95485	.9037	1.0061
Perceived the mean risk	17.878	538	.000	.54499	.4851	.6049
Mean consumption willingness	35.890	538	.000	.99026	.9361	1.0445
Mean of right of way policy	38.471	538	.000	1.07217	1.0174	1.1269

6Table 6. Reliability Test

reliability statistics	
Clone Bach Alpha 0.898	number of terms 24

7Table 7. Conconfirmatory factor analysis

Subactive variables	measurand	Standardized factor loading	Cronbachs α	CR	AVE
Right of Way Policy (RP)	RP1	0.834	0.885	0.872	0.720
	RP2	0.711			
	RP3	0.825			
	RP4	0.873			
Charging Policy (CP)	CP1	0.841	0.882	0.870	0.710
	CP2	0.936			
	CP3	0.844			
Publicity Policy (PP)	PP1	0.842	0.818	0.816	0.610
	PP2	0.725			
	PP3	0.779			
Car Purchase Policy (BP)	BP1	0.765	0.797	0.781	0.597
	BP2	0.745			
	BP3	0.751			
Perceived Value (PV)	PV1	0.762	0.774	0.761	0.535
	PV2	0.739			
	PV3	0.755			
Perceived Risk (PR)	PR1	0.720	0.752	0.759	0.542
	PR2	0.816			
	PR3	0.726			
	PR4	0.708			
willingness to buy (BI)	BI1	0.834	0.896	0.896	0.682
	BI2	0.811			
	BI3	0.823			
	BI4	0.836			

4.1. Model Building Ideas

In the preliminary investigation and preparation process, the author divided the new energy vehicle policy into four latent variables (right of way policy, charging policy, publicity policy and car purchase policy) through literature collection and sorting. The respondents' perceived status was divided into perceived value and perceived risk, among which the purchase intention was the outcome variable.

4.2. Measurement Model Validation

Measurement model tests are divided into reliability tests and validity tests. For the reliability analysis, the reliability test was conducted by observing the clonal Bach coefficient (Cronbach's alpha) and Composite Reliability (CR). It is generally believed that the agreement between the measured

variable question items is acceptable when the Cronbach's alpha value is greater than 0.7 and the CR value is greater than 0.7.

Validity analysis was conducted through two parts: differential validity test and convergence validity test.

Differential validity is analyzed by Pearson (Pearson) method to test the differential validity of each latent variable. From the table reliability test results, we can see that the questionnaire scale has good reliability, and the questionnaire used has high credibility, and after the verification factor analysis with AMOS software, we observed that the detection results of all latent variables meet the standard, and meet the convergence validity and differential validity of the model quality requirements.

8Table 8. Differential validity tests table

	right of way policy	charge policy	conduct propaganda policy	purchase a car policy	perception value	perception risk	purchase wish
Policy of right of way	0.5015						
Charging policy	0.307	0.5916					
Propaganda policy	-0.037	-0.024	0.3794				
Car purchase policy	0.255	0.273	-0.072	0.5207			
Perceived value	-0.056	-0.051	0.263	-0.079	0.3136		
Perceived risk	0.015	0.009	0.132	-0.01	0.113	0.8477	
willingness to buy	0.012	0.011	-0.04	0.014	-0.032	0.014	0.4001
AVE and so on square root	0.849	0.843	0.781	0.773	0.731	0.736	0.826

4.3. Basic Path Assumption

H1: The right-of-way policy has a significant negative impact on the perceived value;

H2: Charging policy has a significant positive impact on the perceived value;

H3: Publicity policy has a significant positive impact on perceived value;

H4: Car purchase policy has a significant positive impact on perceived value;

H5: Right-of-way policy has a significant negative impact on perceived risk;

H6: Charging policy has a significant negative impact on perceived risk;

H7: Publicity policy has a significant negative impact on perceived risk;

H8: Car purchase policy has a significant positive impact on perceived value;

H9: Perceived value has a significant positive impact on the purchase intention;

H10: The perceived value has a significant negative impact on the purchase intention;

4.4. Model Establishment and Suitability Test

The reliability and validation factor test results showed that this study is suitable for analysis using the structural equation model. According to the above description, the model was tested for the goodness of fit, and compared through the CMIN / DF, RMR, GFI, NFI, RFI, IFI, and I L I tests. The analysis results are shown in the following table, which shows that the model fits well with the actual sample data, and the fitting effect is ideal.

9Table 9. Analysis of the model fit degree

	standard	model	degree of fitting
	<3	2.221	good
RMR	<0.05	0.044	good
GFI	>0.9	0.927	good
NFI	>0.9	0.943	good
RFI	>0.9	0.932	good
IFI	>0.9	0.965	good
TLI	>0.9	0.958	good
CFI	>0.9	0.965	good
RMSEA	<0.08 (Reasonable)		
	<0.05 (Very good)	0.490	fine

With the help of AMOS software, the structural equation model analysis is conducted based on the impact of consumption promotion policy on the purchase intention of potential consumers. The model parameter estimation results are shown in the following table, and the following conclusions are drawn therefrom:

(1) Right of way policy, charging policy and car purchase policy all have a significant impact on perceived value. Supporting the original hypothesis, from the perspective of the impact of the three policies on perceived value, charging policy> right of way policy> car purchase policy. It fully reflects that charging facilities are of great significance to

potential consumers. And propaganda policy on perceived value failed to pass significance test, shows that the propaganda policy on perceived value is smaller, it may be propaganda policy content form is too monotonous, scheme design failed to accurately positioning target groups, or with propaganda policy in the new energy vehicles focus on low value.

(2) Right of way policy, publicity policy and car purchase policy all have a significant impact on perceived risk. From the perspective of the impact degree on perceived risk, right of way policy > car purchase policy > publicity policy. The impact of the charging policy on the risk perception is not significant, perhaps because consumers pay more attention to the use value of the new energy vehicle charging policy, and do not pay much attention to the risk level.

(3) Perceived value and perceived risk both have a significant impact on the purchase intention, supporting the null hypothesis, and the impact of the former is more

prominent and has a positive impact. On the side, it reflects that more value factors affect potential consumers to buy new energy vehicles, and the proportion of risk consideration is small. Therefore, it can be seen that diversified publicity methods should be expanded to improve the perceived value of such groups on new energy vehicles in this way, so as to bring new consumption growth points.

(4) The policy variables of the four links of consumption promotion policy have different effects on potential consumers through perceived value and perceived risk. Thus it can be seen that the impact of consumption promotion policies on the purchase intention of potential consumers can be inferred: charging facilities and preferential electricity measures are the most prominent factors affecting the purchase intention of new energy vehicles, and its importance is difficult to make up for through policy publicity, price discount, right of way discount and other measures.

10Table 10. Model parameter estimation results

hypothesis	standardization path coefficient	C.R.	P	conclusion
H1: Right-of-way policy (RP) for perceived value	-0.401	-0.309	**	support
H2: Charging policy (CP) has perceived value	0.972	9.091	***	support
H3: Publicity policy (PP) for perceived value	0.032	0.560	0.571	nonsupport
H4: Car purchase policy (BP) perception value	0.351	2.363	*	support
H5: Right of way policy perceived risk (PR)	-0.697	-3.309	***	support
H6: Charging policy is perceived as a risk	-0.238	-1.501	0.136	nonsupport
H7: Publicize policy-perceived risk	-0.407	-3.312	**	support
H8:: Car purchase policy is perceived as a risk	0.591	2.134	*	support
H9: Perceived value and purchase intention	0.714	13.645	***	support
H10: Perceived the risk of the purchase intention	-0.230	-4.423	***	support

5. Conclusion

5.1. Policy Evaluation of New Energy Vehicles

The survey results show that the policies with the total score of the four assessment variables involving the field, beneficiaries, effect level and implementation effect accounted for 40%, indicating that the relevant policies give a good response validity to the promotion of the development of the new energy vehicle industry. Policies with an acceptable level of response validity are lacking in industrial supervision, policy innovation and talent training, so it is necessary to improve the supporting guarantee in the comprehensive layout of the new energy vehicle industry chain. And policy quality assessment variables mainly manifested in the policy limitation, policy nature, policy evaluation variables have low score, into the research sample of 10 policy limitation are within the scope of the medium-term, no long-term planning, with the replacement of local policy makers, previous policy execution weakened, some policy may face periodic effective, window period to carry out the phenomenon. It is necessary to make further planning for the new energy vehicle policy, formulate programmatic policies, and unified standards should be appropriately formulated for different regions to promote the standardized development of the new energy vehicle industry.

5.2. The Impact of The New Energy Vehicle Policy on The Purchase Intention

(1) Whether the charging policy is effective has the greatest impact on the purchase intention

According to the policy variables through the perceived value and perceived risk of indirect influence on the results can be seen that charging facilities and electricity price preferential charging policy measures is the most prominent factors affecting the new energy vehicle purchase intention. Charging facilities construction helps to alleviate the range problem is not enough, reduce the potential consumer purchase anxiety, and can be seen by the research results perceived value has significant influence on purchase intention, potential consumers pay more attention to new energy vehicles economy, green, emotional identity, so ensure the quality of charging policy and response validity can significantly affect the purchase intention.

(2) The effect of publicity policy is poor, and the radiation scope of publicity channels is small

As can be seen from the model fitting results, the publicity policy is less important in the indirect impact on the purchase intention, but focusing on brand publicity is still an important part of the current product marketing. Diversified forms of publicity can help consumers to obtain more information about products and awaken the potential demand of consumers. The effective implementation of publicity policies itself can enhance consumers' confidence in the

quality of new energy vehicles, so as to enhance the perceived value, guide their purchase behavior, and form a stable consumer group. However, the impact of new energy vehicle publicity policy is very small. On the one hand, it may be because the range of new energy vehicle itself is the key focus, which is easy to cause people's purchase anxiety; on the other hand, it may be the single publicity form of new energy vehicle products, the lack of interest and innovation, and no attention to the core needs of different consumer groups, resulting in the small range of radiation of publicity channels.

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