

## AN EMPIRICAL STUDY ON THE PURCHASE INTENTION OF ELECTRIC VEHICLES UNDER THE INFLUENCE OF CONSUMER PSYCHOLOGY

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**Background:** According to the analysis of relevant literature and data access results, there is little literature to analyze consumers' willingness to buy electric vehicles from an empirical perspective. Consumers' willingness to buy a car is not only affected by the current charging infrastructure, but also related to consumers' expectations of future charging infrastructure, and this expectation is a subjective judgment of consumers rather than a perfect expectation. In view of this background, combined with the current development of electric vehicles in China, this paper discusses consumers' purchase intention of electric vehicles from the perspectives of government, enterprises and consumers.

**Subjects and methods:** This paper takes consumer demand psychology, promotion attitude towards electric vehicles, psychological perceived quality and psychological perceived price as independent variables, and consumer purchase intention choice behavior as dependent variables, which constitute the basic statistical variables. Through the analysis of binary regression model, verify the research hypothesis, sort out and determine the relationship between independent variables and dependent variables, and judge the degree of consumers' willingness to buy electric vehicles at this stage according to the measurement results of regression equation. This paper also analyzes the partial effects of their variables, indicators and dependent variables. Finally, through the design of discrete selection experiment, the declarative preference data of 150 respondents' car purchase behavior including the expected number of charging piles are collected, and the impact of the expected increase of charging piles on consumers' current car purchase intention is analyzed.

**Results:** The final data shows that in the choice of consumers' psychological willingness to buy electric vehicles, the fluctuation of independent variables from strong to weak is: consumers' demand psychology, promotion attitude, psychological perceived quality and psychological perceived price. In the independent variable industrial policy measurement indicators, the impact sensitivity of consumers' purchase intention from strong to weak is technical support, supporting facilities, financial subsidies and publicity and promotion. In the measurement index of perceived quality of independent variables, the influence sensitivity of consumers' purchase psychological intention is ranked from strong to weak as follows: charging time, battery life, endurance ability and performance. In the measurement index of psychological perceived price of independent variable, the influence sensitivity of consumers' purchase intention from strong to weak is actual price, psychological expected price, price ratio difference and cost performance.

**Conclusions:** Through the empirical analysis of the above binary regression model, the research conclusions are as follows. Consumers have no influence on the purchase psychological willingness of electric vehicles; The level of monthly income will significantly affect consumers' psychological willingness to buy electric vehicles; Consumers' attitudes towards the promotion of electric vehicles in the market will significantly affect their psychological willingness to buy electric vehicles; The government's industrial policy on electric vehicles will significantly affect consumers' psychological willingness to buy electric vehicles; The ecological benefit attribute of electric vehicles has no effect on consumers' purchase psychological will; Consumers' perceived quality of electric vehicles will significantly affect consumers' psychological willingness to buy electric vehicles; Consumers' perceived price of electric vehicles will significantly affect consumers' psychological willingness to buy electric vehicles. With regard to the development and promotion of electric vehicles in the future, efforts can be made from the three perspectives of government, enterprises and consumers to further improve the difficulties faced by the development and promotion of electric vehicles in China at this stage. It is hoped that the final data verification results can enable the government to formulate and implement more reasonable industrial policies; Consumers can make more rational interest optimization choices; Enterprises can really make reasonable adjustments from the perspective of market and consumer demand.

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## STUDY ON CONSUMERS' PSYCHOLOGICAL COGNITIVE PREFERENCE FOR AUTOMOBILE FORM

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**Background:** For designers, the idea of a product appearance is often to judge the needs of the market through psychological subjective feelings, and the result is often far from the reality. Coupled with the fierce competition among enterprises, the product life cycle is shortened, so how to quickly and effectively grasp the psychological preference of the public and minority consumers for product modeling, as the basis for new product development, has become the goal of enterprises and designers, and is the main purpose of this study. Therefore, it is necessary to carry out the investigation and research of consumers' psychological cognitive preference.

**Subjects and methods:** This paper discusses consumers' psychological cognition and preference for product form through automobile products that are more concerned by the public, hoping to use this research to gain insight into consumers' psychological needs and preferences for automobile product form. Firstly, taking cognitive psychology as the research object, this paper reveals the internal psychological mechanism of information processing and the acquisition, storage, processing, extraction and application of information in the process of consumer cognitive psychology. This study uses the combination of combinatorial analysis and decomposition analysis to decompose the car form into many elements, but when investigating consumers' cognitive psychology and psychological preference, it takes the complete car form as a sample, analyzes each element of the form in the overall environment, and then connects it with the overall form preference.

**Results:** The results of research and questionnaire show that consumers' psychological consumption is in a transition period, the realization of psychological needs will be more and more guaranteed, and the cognitive structure will tend to be enriched and high-quality. In the coming period of time, consumers' consumption psychology will have a great impact, and their psychological needs will become stronger and stronger, tending to be large and elegant. The internationalization trend of automobile consumption has begun to appear, and the basic consumption trend will be continuous consumption upgrading. The psychological consumption demand of consumers will change from the simple pursuit of material consumption to the pursuit of spiritual consumption and service consumption, and from meeting the demand of basic models to the demand of multi model development.

**Conclusions:** To sum up, the target group prefers high-end economic cars when planning to buy cars, and the form has become a very important factor considered by the target group when buying cars. The cognitive psychological preference of the target group is to pay more attention to cars, and pay more attention to prices than general form elements. Consumers not only pay attention to the overall shape, but also pay great attention to the details. The full, smooth and integrated car shape is the most preferred by the target group. The psychological preference of the hatchback car is higher than that of the hatchback car. There is still a big gap between the shape design of domestic brand cars and the international level.

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## RESEARCH ON THE APPLICATION OF POSITIVE PSYCHOLOGY IN COLLEGE STUDENT MANAGEMENT

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**Background:** With the rapid development of colleges and universities, the number of students is increasing year by year. The primary problem is how to better manage students scientifically and effectively, so as to provide favorable management guarantee for students' healthy growth and development. The students recruited by colleges and universities have some problems, such as poor learning foundation, obvious weariness, lazy daily behavior, lack of self-discipline ability, lack of self-confidence and action.