



Determinants Affecting the Purchase Decision of Chinese Electric Vehicles in Vietnam: Insights from Urban Consumers

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Abstract:

The study aims to identify and analyze the factors influencing the decision to buy Chinese electric cars of consumers in urban areas of Vietnam. In the context that electric vehicles are becoming a new consumer trend, understanding consumer behavior towards products from China – which is still controversial – is necessary to guide market strategies and development policies. The research method used was quantitative, through a survey of 400 consumers in Hanoi and Ho Chi Minh City. The data were collected using a structured questionnaire and processed by SPSS software with descriptive statistical analyses, exploratory factor analysis (EFA) and multivariate linear regression. The results of the study indicate that factors that have a significant influence on purchasing decisions include: reasonable price, car brand, perceived quality, social media and supportive policies from the government. In particular, China's "national image" factor has a slight negative impact on buying decisions. Research contributes practical value in supporting electric vehicle enterprises to build strategies to access the Vietnamese market. At the same time, it also expands the theoretical basis of consumer behavior in the high-tech industry. However, the



study was limited by geographical scope (only in large cities) and the survey period was short, which did not fully reflect the change in behavior over time.

Keywords: Consumer Behavior, Electric Cars, Purchase Decisions, Chinese Car Brands, Urban Consumers, Vietnam

1. Introduction

In the last two decades, the rapid growth of urban populations, severe air pollution, and the need for energy transition have spurred countries around the world to promote the development of environmentally friendly means of transportation. In that trend, electric cars have emerged as a revolutionary technological solution, capable of gradually replacing vehicles using traditional internal combustion engines. With the characteristics of zero CO₂ emissions, smooth operation, low cost of use and the ability to integrate high technology, electric cars are expected to contribute to solving the problem of environmental pollution, saving energy and modernizing the global transportation industry. In Vietnam, the development of electric cars is receiving more and more strong attention from both the State, businesses and consumers. The Government has issued many supporting policies such as exemption/reduction of registration fees, special consumption tax incentives, encouraging investment in charging station infrastructure and supporting industries for electric vehicles. At the same time, large domestic enterprises such as VinFast are also investing heavily in electric vehicle production, and at the same time expanding the market abroad. However, in the context of the nascent domestic electric vehicle market, the participation of foreign businesses – especially from China – has been creating significant fluctuations.

China is currently the world leader in the production and consumption of electric cars. With strong support from the Government, a complete component supply network and large-scale production capacity, Chinese electric vehicle enterprises such as BYD, Wuling, Geely, XPeng, and Nio have quickly risen to become "giants" in the global electric vehicle industry. In the context of globalization and trade liberalization, Chinese electric vehicles – thanks to the advantages of price, technology and output – are penetrating more and more deeply into the Vietnamese market, especially in large cities such as Hanoi, Ho Chi Minh City. Ho Chi Minh City, Hai Phong, Can Tho... These are areas with a high degree of urbanization, relatively stable income, and a population group that is ready to access new consumption trends. However, the choice of Chinese electric cars by



Vietnamese consumers – especially urban consumers – is not only a decision based on product features or price, but is also influenced by many other complex factors. In the context of the strong development of global media and social networks, the image of the country of manufacture, the brand of the vehicle, the perceived quality, integrated technology, after-sales service, and especially the factors of personal trust and feeling play a very important role in the purchase decision. In particular, the factor of "country of origin" is a sensitive variable in the case of products from China, because of the simultaneous existence of both negative prejudices (about poor quality, low durability) and positive admiration (about fast-growing technology, etc competitive price). On the other hand, consumers in large cities have different consumption characteristics compared to rural areas or small towns. They often have higher income levels, are easily influenced by media, social networks, technology trends, as well as have higher expectations for the quality of products and after-sales services. Therefore, the decision to buy an electric car – especially products from China – of this group of consumers will reflect not only personal evaluation but also the trend of approaching technology and modern lifestyle. (Ouyang et al., n.d.; B.C.-P. C. Science & 2024, n.d.; Song et al., n.d.) (economics & 1956, n.d.) (Review & 1968, n.d.; Society & 1968, n.d.)

Currently, in Vietnam, there are still quite few academic studies on consumer behavior for electric vehicles in general, and there is a particular lack of in-depth research on electric vehicles imported from China. Some studies focus on domestic electric vehicles, electric motorcycles, or research on environmental factors, but have not clarified the system of factors that specifically affect consumer behavior in the context of diverse competition in terms of brands, origins and technology today. In addition, very few studies have integrated sociological, behavioral psychology, and communication factors into the analysis of urban consumer behavior for electric cars. (Michael et al., 2020)

Therefore, it is necessary to study the factors influencing the decision to buy Chinese electric cars from the perspective of Vietnamese urban consumers, which makes sense both theoretically and practically. From a theoretical perspective, this study inherits and expands on basic theories such as Planned Behavior Theory (TPB), Technology Acceptance Model (TAM), and adds practical variables such as price, technology, communication, national image, and supportive policies. From a practical perspective, the research results can help businesses better understand consumer psychology, thereby building marketing, product development and brand communication strategies that are



more suitable for the Vietnamese market. In addition, the study also provides scientific evidence for policymakers to consider in promoting green transport infrastructure, and at the same time build reasonable technical barriers to regulate the electric vehicle import market. In the context that energy transition and green transportation development are national priorities, understanding consumer behavior – especially urban consumers – for Chinese electric car products is a topical, practical and highly scientific topic. This is not only the story of the electric vehicle market, but also a manifestation of the trend of consumer globalization, the change in the perception and behavior of modern consumers, as well as a challenge for Vietnamese businesses in competing with foreign competitors at home. (Lieberman et al., n.d.)

2. Literature Review

Consumer behavior is a multidisciplinary field of study that seeks to understand how, why, and conditions consumers choose, use, and evaluate products or services (Kotler & Keller, 2016). In the context of the rapidly growing electric car market, especially with the entry of Chinese brands, understanding consumer behavior has become essential to formulate appropriate marketing and product development strategies.

One of the popular theoretical models applied to the analysis of consumer behavior is the Consumer Buying Behavior Model by Engel, Blackwell and Miniard (1995). This model indicates that an individual's purchasing behavior is influenced by three groups of factors: personal characteristics (personalization), psychological factors (perceptions, attitudes, motivations) and social factors (impact from family, friends, media, etc.). In addition, Ajzen's Planned Behavior Theory (1991) is also the basis for analyzing the relationship between attitudes, subjective norms and behavioral control perceptions on purchase intent. This theory holds that purchase intent is the strongest indicator of actual behavior, and that factors such as brand trust, trust in the country of manufacture, and perceived value will directly affect shopping intention and behavior. Price is one of the key factors influencing consumer behavior, especially for high-value products such as electric cars. According to Monroe (1990), price is not only a cost factor but also a reflection of perceived quality. In many previous studies, Vietnamese consumers tended to appreciate reasonably priced vehicles, which come with benefits such as fuel economy and low maintenance costs (Nguyen & Vo, 2022). For Chinese electric vehicles, competitive prices are a clear advantage, but sometimes they are associated with doubts about quality and durability. (economy & 1966, 1966)



Zeithaml (1988) argues that perceived quality is the overall consumer's assessment of the superiority of a product. In the context of electric vehicles, the perceived quality includes factors such as the distance traveled on each charge, battery life, smart features, and safety. Many studies in Vietnam show that consumers are still apprehensive about the reliability and technology of Chinese electric vehicles (Pham & Le, 2023). This impacts the willingness to pay and the decision to buy. Trust in the brand and image of the country where the product is manufactured has a significant influence on purchasing decisions (Roth & Romeo, 1992). In the case of China, the national image is often affected by the prejudice of cheap, low-quality goods, especially in high-tech products. However, recently, Chinese electric vehicle brands such as BYD, NIO or Wuling are making a strong transformation, as shown by global sales and international awards. However, in the Vietnamese market, confidence in Chinese products is still limited, requiring further research on the influence of national image on electric vehicle purchase decisions (Tran & Bui, 2023).

Social media plays an increasingly important role in modern consumer behavior. Platforms such as Facebook, YouTube, and TikTok provide information, reviews, and influence consumer perceptions of products. According to Kaplan & Haenlein (2010), social media creates a ripple effect and has a strong impact on consumer behavior, especially in emerging technology industries such as electric vehicles. In Vietnam, KOLs, vehicle reviewers, and electric vehicle user groups on social media are the main source of information for urban consumers (Le & Nguyen, 2024). The Government plays an important role in promoting electric vehicle consumption through incentive policies such as tax exemption and reduction, price subsidies, and the development of charging station infrastructure. IEA research (2023) shows that in Asian countries, active government intervention is a success factor in developing the electric vehicle market. In Vietnam, although there have been a number of supportive policies, the level of impact is still limited. Therefore, measuring the role of supportive policies in the purchase decision of electric vehicles is an important content in this study. (Ou et al., n.d.; J. S.-J. of the A. of M. Science and 1979, 1979; studies and 2019, n.d.)

In the world, there have been many studies on consumer behavior for electric cars. For example, research by Egbue and Long (2012) in the US shows that concerns about technical performance and lack of infrastructure are the main barriers that make consumers hesitant to switch to electric vehicles. Meanwhile, in China, Wang et al. (2020) confirmed



that brand factors and government incentives have a positive effect on EV consumption behavior. In Vietnam, research by Tran Van Nam (2022) shows that consumers are most interested in price and brand when choosing electric vehicles. However, most previous studies have focused on domestic electric vehicles (such as VinFast) without clarifying the "Chinese origin" factor in consumer behavior. This creates a research gap that needs to be filled in the current topic. From the overview of the document, it can be seen that, although the consumption behavior of electric vehicles has been extensively studied, the focus on the perspective of products from China in the context of Vietnam is still relatively limited. Moreover, psychosocial factors, social network influence, and national image have not been systematically integrated into consumer behavior research models in Vietnam. Therefore, this study will focus on filling the above gaps, and at the same time building a research model suitable for the conditions and characteristics of urban consumers in Vietnam. (Ouyang et al., n.d.)

3. Methodology and Data base

Research using Consumer Behavior Theory includes:

(1) Recognizing → needs (2) Seeking → information (3) Evaluating → options (4) Purchasing decisions → (5) Post-purchase behavior

In the context of electric cars, especially products from China, the factors that influence each of these stages are very specific: price, brand, national origin, technology, communication, etc.

Theory of Planned Behavior (TPB) – Ajzen (1991)

- Three main factors influence purchase behavior intent:
 - Attitude
 - Subjective norms
 - Perceived behavioral control

Theoretical framework described on dependent variables and independent variables

- Dependency variable: Intention or decision to buy a Chinese electric car
- Groups of independent variables (according to the extended TPB and consumer behavior theory):



Figure 1: Overview of the group of independent variables and dependent variables

Group of elements	Overview
1. Attitude towards the product	The level of love, satisfaction, and positive feelings about Chinese electric vehicles
2. Pricing and affordability	Alignment with income and value expectations
3. Perceived quality	Reliability in performance, safety, durability
4. National image	The impact of prejudice about products from China
5. Car brand	Brand prestige, reputation, and popularity
6. Technology and features	Utilities, modernity, driving experience
7. Social norms	Influence from friends, relatives, social networks
8. Communication and advertising	Level of access to and trust in media information
9. Support Policy	Tax/fee incentives, charging stations, government or carrier support
10. Behavioral Control Cognition	Sense of control: easy to access, easy to maintain, easy to use

Research Methodology

This study uses the main quantitative method, combined with the complementary qualitative method, to ensure systematic, objectivity and reliability in exploring the factors influencing the decision to buy Chinese electric cars of consumers in urban areas of Vietnam.

a. Qualitative study design (phase 1 - exploratory)



- Purpose: To clarify and supplement potential variables affecting purchase decisions, adjust measurement indicators to suit the actual context of Vietnam.
- Methods: In-depth interviews with 10 consumers who have purchased or are considering buying an electric car, and 3 experts in the field of automotive, marketing, or consumer psychology.
- Sample selection technique: Select the target sample (purposive sampling).
- Data analysis: Content analysis, synthesizing opinions to build quantitative questionnaires.

b. Quantitative study design (phase 2 - accreditation)

- Objective: To measure the influence of identified factors on urban consumers' Chinese electric car purchase decisions.
- Research design: The research model is based on the theory of extended planned behavior (TPB), including many independent variables (price, quality, brand, technology, national image, media, etc.) and a dependent variable (purchase decision).

c. Subjects and scope of research

- Survey subjects: Consumers aged 18 years and over, living in large cities (Hanoi, Ho Chi Minh City, Da Nang, Hai Phong), have an awareness of Chinese electric cars and have the financial ability to buy a car.
- Sample selection criteria:
 - Are interested in or have ever considered buying an electric car
 - Have a preliminary understanding of some Chinese electric vehicles in the Vietnamese market
 - Prioritize people who have used or tested the product

d. Sample size and sample selection method

- Sample size: 250 people to ensure reliability for exploratory factor analysis (EFA) and multivariate regression.



- Sample selection method: Combine convenience sampling and quota sampling to ensure a balance of age, gender, and geographic area.

e. Data collection tools

- Tool: Structured questionnaire, consisting of 3 parts:
 1. Demographic information: age, gender, occupation, income, vehicle used
 2. Awareness and evaluation of influencing factors (using a 5-level Likert scale)
 3. Intention and behavior of buying Chinese electric vehicles
- How to implement:
 - Issue questionnaires via online form (Google Form) and direct surveys at electric vehicle showrooms, commercial centers, and high-end residential areas.

f. Scales and Measurements

- 5-point Likert Scale:
 - 1 – Completely disagree
 - 2 – Disagree
 - 3 – Neutral
 - 4 – Agree
 - 5 – Totally agree
- Variables will be measured through reference indicators from previous studies (with context correction), for example:
 - Price: "The car is priced in line with my income"
 - Perceived quality: "I believe in the durability of Chinese electric vehicles"
 - National image: "I have faith in products from China"



- Social media: "I am influenced by opinions on social networks when choosing a car"

g. Data Analytics

- The data is processed using SPSS software (or AMOS/SmartPLS if SEM extension).
- The analysis steps include:
 - Reliability Test Scale: Cronbach's Alpha (> 0.7)
 - Exploratory Factor Analysis (EFA):
 - Detect and group potential influencers
 - KMO test (> 0.6), extract variance ($> 50\%$)
 - Pearson Correlation Analysis: Identifying Relationships Between Variables
 - Multivariate linear regression analysis: Determine how much each factor influences the purchase decision
 - Multilinear Testing: Based on VIF and Durbin-Watson
 - (If applying SEM: Testing of measurement models and structural models)

h. Ensuring the reliability and value of the research

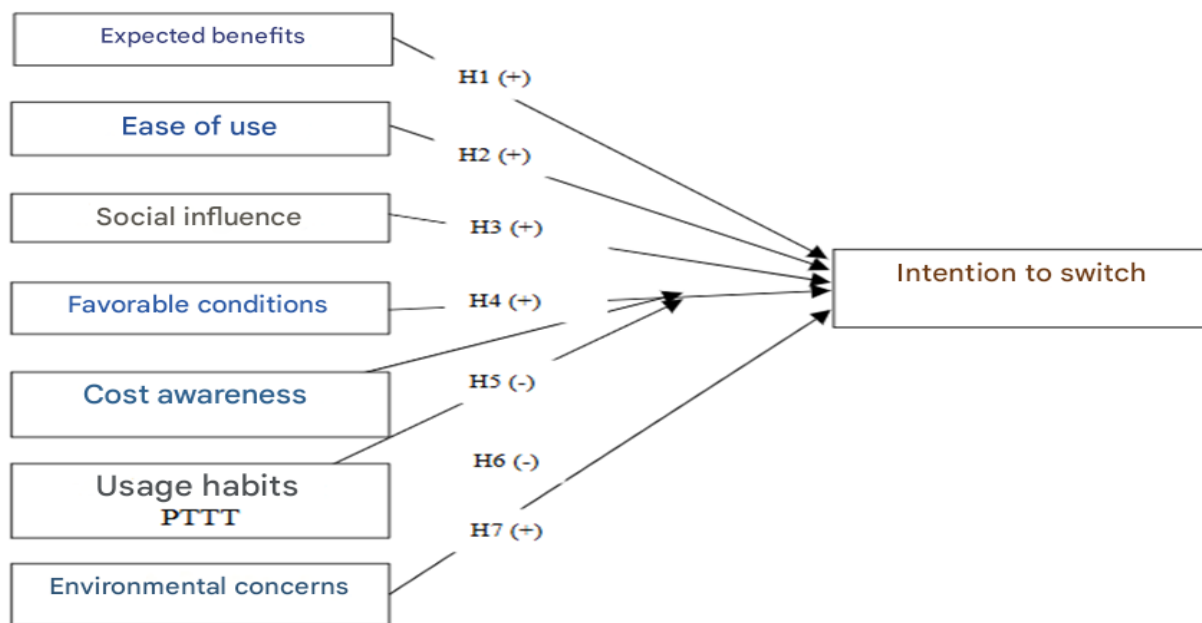
- Reliability: Data is collected from a variety of sources, with a thorough vetting process.
- Value: The scale is built on theory and adjusted through expert interviews.
- Ethics:
 - Survey participants are committed to confidentiality of personal information.
 - All information collected is for academic research purposes only.

4. Results and Findings

The survey results of the study, the authors summarized the conversion intention of consumers based on the following results (Figure 2)



Figure 2: Analytical framework of consumer behavior



According to the model given, the intention of Vietnamese urban consumers to switch to Chinese electric vehicles is not a single decision but the result of a complex interaction between many factors. These factors can be divided into two main groups: the pushing group and the hindrance group. The motivating group is represented by the H1, H2, H3, H4 and H7 hypotheses with positive relationships. First, consumers will weigh based on expected benefits (H1). If they believe that Chinese electric vehicles offer many outstanding advantages such as low maintenance and operating costs, modern technology, or attractive design, the purchase intention will increase. Next is ease of use (H2). An electric scooter with a simple charging system, a friendly control interface, and an uncomplicated operating process will remove the psychological barrier for beginners. Social influence (H3) also plays an important role; when seeing friends, colleagues or family members using Chinese electric vehicles and giving positive feedback, consumers will feel more confident and confident in their decision. In addition, favorable conditions (H4) from the outside such as the development of the public charging station network, preferential policies on taxes and fees or financial support from the government will create an ideal environment to promote the transition. Finally, environmental concerns (H7) are a strong motivator. Consumers who are environmentally conscious, eager to reduce their



carbon footprint and contribute to a greener city will tend to choose electric vehicles over traditional gasoline vehicles. (economy & 1966, 1966; studies & 2019, n.d.)

In contrast, the H5 and H6 hypotheses suggest that factors have a negative impact, acting as barriers. Cost awareness (H5) is one of the biggest barriers. Despite the low operating costs, the initial purchase price of electric vehicles, especially compared to gasoline models in the same segment, can be a significant obstacle for consumers. This perception can reduce purchase intent, even if the other benefits are appealing. At the same time, the habit of using traditional means of transport (H6) is also a notable obstacle. Many consumers have been familiar with gasoline vehicles for years, from convenient refueling to driving habits, and they may feel apprehensive about having to completely change that habit to adapt to a new technology like electric vehicles. (Shu et al., n.d.; Wan et al., n.d.)

To succeed in convincing Vietnamese urban consumers to buy Chinese electric vehicles, manufacturers and distributors need to maximize the motivators and at the same time find ways to minimize barriers. This includes strong communication of benefits, enhancing the user experience, building a supporting ecosystem and finding ways to solve the initial cost problem, as well as gradually changing long-standing consumption habits.

Figure 3: Demographic characteristics of survey subjects

Sex	Male	124	57.9
	Female	90	42.1
Age	18-25	21	9.8
	26-35	44	20.6
	36-45	80	37.4
	46-55	51	23.8
	Over 55	18	8.4
Level education	High school	7	3.3
	Intermediate level	10	4.7
	College	33	15.4
	University	128	59.8
	After university	36	16.8



Figure 3 provides a detailed view of the demographic characteristics of the study sample, helping us to clearly identify the portraits of the consumers surveyed. The analysis of these characteristics is a fundamental step to understand the context and can infer the indirect connection with the topic "Factors influencing the decision to buy Chinese electric cars in Vietnam". Although the table does not directly give results on the causal relationship, it does reveal the characteristics of the group of people who are likely to be interested in or intend to buy an electric vehicle. In terms of gender, with 57.9% of the subjects being male compared to 42.1% being female, it can be seen that men are dominant in the survey sample. In the context of Vietnamese culture, men are often the main decision-makers in purchasing large assets such as cars. Therefore, it makes sense to focus on this group of people, as they are the group that has the most influence on the final decision. (Liu et al., n.d.)

In terms of age, the table shows a clear distribution, with the 36-45 age group accounting for the highest proportion (37.4%), followed by the 46-55 (23.8%) and 26-35 (20.6%) groups. This indicates that the study sample is mostly middle-aged people. These are people who have stable careers, earn enough to pay for a car, and often have families. They can be very careful people who consider the cost, benefits, convenience, and safety of buying a car. They are also more likely to be interested in environmental issues and new technologies, making them a potential customer group for electric vehicles.

The analysis of educational attainment showed a significant focus on highly qualified subjects. The group with a university degree accounts for an overwhelming proportion (59.8%), and adding the postgraduate degree (16.8%) and college degree (15.4%), the total number of subjects with a college degree or higher is more than 90%. This suggests that the study sample is people who have access to and process complex information, who can easily learn about new technology, preferential policies, and the benefits of electric vehicles. A high level of education also often comes with a good income, which is an important factor affecting the financial ability to own an electric vehicle. Thus, through this demographic table, we can imagine a rough picture of the group of consumers who are likely to be interested in Chinese electric vehicles in Vietnam: that is, middle-aged men, with a high level of education and a stable income. This is a solid basis for researchers and businesses to continue to delve into more specific psychological and behavioral factors, thereby coming up with effective marketing and business strategies. (Fan et al., n.d.)



Figure 4: Surveyor's income

Income per month	Under 25 million VND	78	36.5
	From 25 to under 50 million VND	75	35.0
	From 50 to under 75 million VND	39	18.3
	From 75 to under 100 million VND	14	6.5
	Over 100 million VND	8	3.7

Table Figure 4 presents the monthly income distribution of the study sample, an important factor in analyzing affordability and purchasing decisions for high-value products such as electric cars. While the table does not directly represent a causal relationship, it does provide an insight into the market potential and target customer groups. The analysis of the data shows a diverse income distribution, but focuses mainly on middle-income groups. Specifically, the groups with an income of less than 25 million VND and from 25 to less than 50 million VND accounted for the highest percentage, respectively 36.5% and 35.0%. Combined, these two groups accounted for more than 71% of the total survey sample. This suggests that the study subjects are mainly middle-class income earners in urban areas. The higher income group, from 50 to less than 75 million VND, accounted for 18.3%, while the group with an income of 75 million VND and above accounted for only a very small proportion (6.5% and 3.7%). The connection to the research topic is clear: financial ability is a major barrier to buying an electric vehicle. With the majority of the study sample having a median income, the price of Chinese electric cars became a top deciding factor. Chinese automakers often have a price advantage over Western and Japanese rivals, which can appeal to consumers in this income segment. Therefore, to convince this group of customers, Chinese electric vehicle manufacturers need to focus on emphasizing price advantages, low operating costs, and attractive financial support policies that are in line with the affordability of the urban middle class. (W. Li et al., 2017)



Figure 5: Cronbach's Alpha Scale Reliability Test Results

Observation variable	Total variable correlation	Cronbach's Alpha if the scale is	Multiply load factor
Expected Benefit (PE): Cronbach's Alpha = 0.808			
PE1	0.593	0.774	0.590
PE2	0.746	0.702	0.838
PE3	0.617	0.762	0.794
PE4	0.550	0.793	0.666
Ease of Use (EE): Cronbach's Alpha = 0.865			
EE1	0.717	0.828	0.759
EE2	0.721	0.828	0.808
EE3	0.717	0.827	0.737
EE4	0.712	0.830	0.753
Social influence (SI): Cronbach's Alpha = 0.816			
SI1	0.699	0.752	0.845
SI2	0.683	0.761	0.864
SI3	0.271	0.865	-
SI4	0.710	0.747	0.803
SI5	0.700	0.752	0.737
Facilitating conditions (FC): Cronbach's Alpha = 0.726			
FC1	0.654	0.577	0.826
FC2	0.642	0.587	0.849
FC3	0.663	0.575	0.857
FC4	0.167	0.845	-
Cost Perception (PC): Cronbach's Alpha = 0.882			
PC1	0.773	0.830	0.865
PC2	0.756	0.845	0.840
PC3	0.782	0.822	0.846

The results of Figure 5 show that the SI3 and FC4 observation variables are excluded because the total variable correlation has not reached a minimum value of 0.3. After the observation variable type, the Cronbach's Alpha values of the SI and FC variables were significantly improved (0.865 and 0.845). Other observed variables were retained due to meeting the inspection requirements.



Figure 6: Intention to convert to electric vehicle purchases through Cronbach's Alpha analysis

Habits of using PTTT (HB): Cronbach's Alpha = 0.894			
HB1	0.843	0.833	0.844
HB2	0.659	0.901	0.835
HB3	0.796	0.852	0.847
HB4	0.779	0.860	0.802
Environmental Concern (EC): Cronbach's Alpha = 0.828			
EC1	0.614	0.802	0.710
EC2	0.654	0.785	0.749
EC3	0.703	0.761	0.820
EC4	0.653	0.784	0.769
Switching Intention (IN): Cronbach's Alpha = 0.812			
IN1	0.675	0.729	0.831
IN2	0.674	0.730	0.860
IN3	0.638	0.766	0.837

EFA analysis with 7 independent variables PE, EE, SI, FC, PC, HB, EC showed the following results: KMO = 0.793, Bartlett test was statistically significant (sig = 0.000), 26 observed variables with factor load coefficients greater than 0.5 converged on 7 groups of factors with eigenvalue greater than 1 and explained 73.326% of the variation of the data. The EFA analysis with the IN dependent variable showed the following results: KMO = 0.714, the Bartlett test was statistically significant (sig = 0.000), the 3 observed variables converged on a group of factors with an Eigenvalue greater than 1 and explained 72.703% of the variability of the data. The results of the Pearson correlation analysis in Table 4 show that the correlation between the SI variable and the IN subvariable is not statistically significant (sig = 0.481 > 0.05). Therefore, the variables PE, EE, FC, PC, HB, and EC are included in the multivariate regression model

Figure 7: Pearson correlation analysis results

PE	EE	SI	FC	PC	HB	EC	IN
0,492**	0,551**	0,048	0,422**	-0,488**	-0,488**	0,493**	1
0,000	0,000	0,481	0,000	0,000	0,000	0,000	



Figure 8: Results of multivariate regression analysis

Adjusted R² = 0.557
 Durbin-Watson index = 1.547
 F = 45.670, sig = 0.000

Model	Unstandardized coefficients		Normalization coefficient	t value	Thought level	Collinearity statistics	
	B	Standard error	Beta			Tolerance	VIF
1 Constant	2,785	0.457		6,088	0,000		
PE	0.142	0.060	0.139	2,377	0.018	0.606	1,650
EE	0.133	0.059	0.141	2,270	0.024	0.539	1,854
FC	0.174	0.047	0.183	3,693	0,000	0.851	1,175
PC	-0.163	0.049	-0.175	-3,312	0,001	0.748	1,338
HB	-0.226	0.039	-0.288	-5,798	0,000	0.845	1,183
EC	0.261	0.057	0.245	4,610	0,000	0.734	1,363

The results of the analysis of figures 7 and 8 show that the regression model is capable of explaining 55.7% of the variability of the dependent variable (adjusted R² = 0.557). The model had no autocorrelation (Durbin-Watson = 1.547) and was judged to be suitable (F = 45,670, sig = 0.000). The regression results also showed that 4 variables positively impacted the IN-dependent variable, namely PE (B = 0.139; sig = 0.018), EE (B = 0.141; sig = 0.024), FC (B = 0.183; sig = 0.000) and EC (B = 0.245; sig = 0.000). These effects are all statistically significant, so the H1, H2, H4 and H7 hypotheses are accepted. In addition, the authors also noted 2 variables that negatively impacted the IN-dependent variable, namely PC (B = -0.175; sig = 0.001) and HB (B = -0.288; sig = 0.000). These effects are statistically significant, so the H5 and H6 hypotheses are accepted. Since the correlation between the SI and IN variables is not statistically significant, the H3 hypothesis is not accepted. The VIF coefficients of independent variables < 2 show that there is no multi-collinear phenomenon.

5. Discussion

The results of the study show that the decision to buy Chinese electric cars of urban consumers in Vietnam is influenced by many multi-dimensional factors, including: price, brand, perceived quality, social influence, national image, and supportive policies from the government. These findings not only reflect the specific context of the Vietnamese market,



but also contribute to strengthening and clarifying the hypotheses in Consumer Behavior Theory and Technology Acceptance Model (TAM).

Firstly, the reasonable price factor is identified as one of the most important factors influencing the decision to buy a Chinese electric vehicle. This is consistent with previous studies (Kotler & Keller, 2016; Li et al., 2020), in which price is considered as a barrier as well as a major driver in the consumption of new technology goods, especially in developing markets. In the context that Vietnamese urban consumers are still apprehensive about the cost of owning electric vehicles, price competition from Chinese brands has significantly changed the balance of product selection. However, choosing for a low price also leads to some durability and quality concerns – which is clearly reflected in the role of perceived quality. (Wang et al., 2016; Zhang et al., n.d.)

The perceived quality factor has been shown to have a significant influence on purchasing decisions, similar to the findings in a study by Zeithaml (1988), that consumers are not only interested in price but also evaluate the value of a product based on their perception of quality and usefulness. With electric vehicles – which are high-tech and affect personal safety – consumers tend to consider more about the perception of the engine, battery, energy consumption, and reliability in operation. The brand factor acts as an intermediary between perceived quality and purchase decision. While Vietnamese consumers often have a certain reservations about Chinese goods, some brands such as BYD, Wuling or Geely are gradually building a foothold and a positive image thanks to technological improvements and strong investment in media. This is in line with the theory of brand value (Brand Equity Theory – Keller, 1993), which argues that a strong brand can reduce perceived risk and increase psychological value in consumption. (Sovacool et al., n.d.; Zhang et al., n.d.)

Social influence, especially from the media, friends, and social media channels such as Facebook, TikTok, and YouTube, has also been confirmed to have an impact on consumer behavior. This shows that urban consumers are strongly influenced by the trend of community consumption and reviews from previous users. In the context of the sharing economy and the development of digital technology, shopping behavior is no longer an individual action but is affected by the pervasiveness of digital information. This finding is also consistent with the theory of social influence (Ajzen, 1991 – Theory of Planned Behavior), which holds that subjective attitudes and norms both affect behavioral intentions. Another notable point is that China's country-of-origin image factor has a slight



negative effect on purchasing decisions, especially among consumers with high education and stable incomes. This is in line with research by Han (1989), who argued that national image can shape beliefs in the quality, ethics, and reliability of products. Although Chinese automakers are improving production and design capacity, social prejudice is still a barrier to overcome if they want to expand their market share in Vietnam. (Chu et al., n.d.; L. Li et al., n.d.)

Notably, supportive policy factors from the government – including tax incentives, support for charging infrastructure and directional communication – have a positive impact on consumer decisions. This result is not surprising in the context of the "green transportation" policy that the Vietnamese Government is promoting, but it shows the essential role of institutions in regulating the fledgling electric vehicle market. The impact of policy also reflects the relationship between institutional structure and market behavior, which has been emphasized in the New Institutional Theory (DiMaggio & Powell, 1983). In addition to the results that are in line with expectations, the study also found some points to note. For example, although the "test drive experience" factor is considered important in many international studies (Schuitema et al., 2013), in Vietnam this factor is not prominent because many people have never had the opportunity to have direct contact with Chinese electric vehicles. This shows that the market still has many limitations in terms of distribution channels, access to products and after-sales services – factors that indirectly affect consumer behavior. Furthermore, the study also found differences in consumer behavior by demographic group. Consumers under the age of 35 tend to be more positive about Chinese electric vehicle products, largely because they have a high level of adoption of technology, less brand prejudice, and are susceptible to social media. Meanwhile, the group over 40 years old is more cautious, demanding more quality, warranty and service. (Lin et al., n.d.; Wei et al., n.d.; Xu et al., 2020)

An important point to emphasize is that the change in consumer behavior does not happen immediately. The acceptance of Chinese electric vehicles by Vietnamese people is the result of a negotiation process between the need for savings, safety, social image and sustainable consumption trends. Therefore, any marketing policy or market strategy needs to be based on a holistic view, rather than simply focusing on price advantages. In summary, this discussion shows that Vietnamese consumers' decision to buy Chinese electric vehicles is the result of a complex interaction between economic, social, psychological and political factors. These findings are not only practical for businesses and



policymakers, but also contribute to enriching the theoretical foundation of consumer behavior in the context of the global green transition. (Guo et al., 2023; Jiaqi et al., n.d.; Zhao et al., n.d.)

6. Conclusion

In the context that the world is strongly shifting to the trend of using environmentally friendly transportation, electric cars are gradually becoming a potential choice in many countries, including Vietnam. In particular, with the increasingly strong entry of Chinese electric vehicle companies – which have competitive advantages in price, technology and product ecosystem – it is essential to study consumer behavior and factors influencing Chinese EV buying decisions in Vietnam. This study focused on surveying urban consumers in two major cities – Hanoi and Ho Chi Minh City – to determine the impact of factors such as price, perceived quality, brand image, social media, influence from relatives, etc environmental factors, and especially the country-of-origin image. The results show that factors such as competitive prices, perceived product quality, communication and social media access, and support from the government (e.g., registration tax exemptions, preferential vehicle registration policies) have a significant influence on Chinese EV purchase decisions. However, China's "national image" factor still has a certain negative in the perception of urban consumers, affecting the level of willingness to pay and confidence in Chinese car brands. This is a psychological barrier and a challenge for Chinese businesses when entering the Vietnamese market. In addition, the study suggests that the decision to buy an electric car is not merely an economic decision, but also has social, technological and environmental factors. Young, educated consumers who live in large cities tend to be more open to new technology and less bound by national prejudice, making it easier for Chinese EVs to be receptive.

From the results of the study, electric vehicle manufacturers and distributors can build more appropriate marketing strategies, focusing on improving service quality, enhancing brand image, promoting digital media, and taking advantage of supportive policies from the government to increase competitiveness. In terms of policies, the state needs to continue to improve the legal framework, invest in charging infrastructure and encourage green consumption, contributing to the development of a sustainable electric vehicle market. However, the study also faces some limitations such as a narrow survey scope, not representative of all Vietnamese consumers, and not yet assessing the factors that change consumer behavior over time. In the future, extensive research on rural areas,



different demographic groups, as well as in-depth analysis by specific brands will contribute to shedding more light on the trend of electric vehicle consumption in Vietnam.

Ethical Statement

No animals were used in this study; thus, no ethical approval is required.

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Declaration of Conflict of Interest

The author declares no conflict of interest.

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