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An Examination on Purchase Intention of New Energy Vehicles Among 31-60 Years Old Consumers in Sichuan, China

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Abstract

Purpose: The objective of this research is to investigate the factors influencing consumers' purchase intentions regarding new energy vehicles in the region of Sichuan, China. A conceptual framework has been developed, encompassing six key variables: trust, attitudes, perceived risk, perceived behavioral control, perceived quality, and purchase intention. **Research design, data, and methodology:** The researchers employed quantitative research techniques, utilizing questionnaires as their primary research instrument. The target population consisted of individuals in Sichuan, China, who either own or express an interest in purchasing new energy vehicles. The study's sample size comprises individuals aged 31 to 60 years old, totaling 500 respondents. Data collection was conducted through a combination of judgmental, convenience, and snowball sampling methods. The primary objective of this investigation is to leverage the power of confirmatory factor analysis (CFA) and structural equation modeling (SEM) as robust statistical methodologies. **Results:** Trust has a significant impact on attitudes. Purchase intention is significantly impacted by attitude and perceived behavior control, but not by perceived risk and perceived quality. **Conclusions:** By recognizing the significance of age as a determinant in consumer decisions and tailoring strategies accordingly, organizations can engage consumers effectively across different age groups and foster long-term customer relationships.

Keywords : Trust, Attitudes, Perceived Quality, Purchase Intention, New Energy Vehicles

JEL Classification Code: E44, F31, F37, G15

1. Introduction

New energy vehicles consist of four categories, hybrid electric vehicles (HEV), pure electric vehicles (BEV, including solar vehicles), fuel-cell electric vehicles (FCEV) and other new energy vehicles (such as supercapacitors, flywheels and other efficient energy storage vehicles). Unconventional power sources indicate the fuel which are not gasoline and diesel (Kumar et al., 2023).

In the past 140 years, new energy vehicles have experienced ups and downs in the developing process, but became gradually mature. In China, a number of new energy vehicles made by independent brands also emerged, leading the rapid development of new energy technology in the world, driving mankind to a bright future that is efficient and green (Yu et al., 2019).

The 880 million RMB invested during the tenth "Five-Year Plan" has only been turned into electric buses for the Olympics. With the rise of a number of privately owned car companies such as Geely and BYD, the authority begun to understand that defining products from its perspective has little effect on the NEV market, and they need to use policy to guide the development of car companies. Therefore, since 2009, the country has introduced a new series of access standards and welfare policies for the industry of new energy vehicle (Zhang et al., 2014).

A large number of car manufacturers are springing up, partly because of the policy and partly because of the

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growing electric car suppliers in China. The high degree of electrification of cars makes many traditional car companies less dominant, also bringing the advantages of the Internet to the car business (Reuters, 2017). National and local policies function like two wheels to drive the continued development in the new energy vehicle industry with gradually improved mandatory standards, and extensive financial subsidies. The number of new energy vehicles has continued to rise, and the market is in a stage of rapid development. According to China's national development vision, the sales volume of new energy vehicles is expected to exceed 5 million in 2025 (Colegate, 2022).

In this research, the study model was developed through an amalgamation of prior research and a comprehensive review of existing literature. The model comprises six independent variables, mediator variables, and dependent variables. The primary objective of this study is to investigate the determinants influencing consumers' purchase intentions regarding new energy vehicles in Sichuan, China. The conceptual framework encompasses six key variables: trust, attitudes, perceived risk, perceived behavioral control, perceived quality, and purchase intention.

2. Literature Review

2.1 Trust

Mayer et al. (1995) explained trust as "the willingness of a party to be impacted by the actions of another party because of the hope that the other will show a particular action main to the trustor." Trust is "a state of perceived vulnerability or danger derived from individual uncertainty regarding the motives, intentions, and potential behavior of others on whom they depend" (Kramer, 1999, p. 571). According to Abbad et al. (2011), trust and safety as one construct, among others, represent an important limitation for e-commerce in Jordan. The study regards the trust as knowledge-based (Gefen et al., 2003).

Trust is defined as perceptions of vulnerability or risk arising from an individual's uncertainty about the motives, intentions, and latent behaviors of others they rely on (Kramer, 1999). Hart and Saunders (1997) pointed out that trust is among the most effective ways to lower consumers' uncertainty. Angulo et al. (2005) further proved that consumers' confidence in food labeling is considered the most crucial factor affecting purchase intention. As proved by Wu and Chen (2005), trust functions as a prerequisite for attitudes and purchase behavior. Hence, the hypotheses for the relationship between trust, attitudes, and purchase intention are:

H1: Trust has a significant impact on attitudes.

H2: Trust has a significant impact on purchase intention.

2.2 Attitudes

Attitudes toward a behavior are mainly based on consumers' past experiences, resulting in the clients' judgments about a specific behavior (Kashif et al., 2018). Consumers' attitudes toward online buying form a major determinant in developing their intentions to buy online (Monsuwe et al., 2004). If consumers are satisfied with an electronic retailer's service, then his/her attitude causes favorable online purchases (Holzwarth et al., 2006; Hsu et al., 2014). Attitude is a behavior that can be referred to as an individual's positive or negative evaluation of relevant behavior and is made up of an individual's salient beliefs regarding the perceived consequences of performing a behavior (Al-Debei et al., 2013; Kim & Park, 2005).

Honkanen et al. (2006) found a significant positive relation between consumers' attitudes and purchase intention. Additionally, according to the studies on organic food consumption carried out by Padel and Foster (2005) and Saba and Messina (2003), the relationship between consumer attitude and purchase intention is significantly positive. Therefore, the third hypothesis is:

H3: Attitudes have a significant impact on purchase intention.

2.3 Perceived Risk

Dowling and Staelin (1994) defined perceived risk as the uncertainty level individuals feel when making particular decisions. Perceived risk will appear when considering the possibility of various negative consequences (Swan & Nolan, 1985). Perceived risk refers to the negative consequences of using the product or enjoying the service. It involves the uncertain outcomes that could occur before or during the purchase of a product (Sun, 2014). Perceived risk refers to the trust of customers and the potency of potentially negative things. (Kim et al., 2008).

According to Mitchell and Boustani (1994), consumers usually tend to reduce the risk perception to the lowest level while amply the perceived value to the highest level when they undertake their action in buying. Featherman and Pavlou (2003) also claimed that the perceived risk influences people's purchasing intention in a negative way. In addition, risk perception was found to have a negative effect on both purchase attitude and intention (Forsythe & Shi, 2003). Thus, the fourth hypothesis is proposed below:

H4: Perceived risk has a significant impact on purchase intention.

2.4 Perceived Behavioral Control

Perceived behavioral control shows the individual's perception of the ease or difficulty of undertaking a specific

behavior (Ajzen & Fishbein, 1980). Perceived behavior control is a product of control ability and control belief. The higher the level of these comprehensive factors, the stronger the influence of perceived behavior control (Ho et al., 2011). PBC refers to "the perceived ease or difficulty of performing the behavior. It is assumed to reflect experience as well as anticipated impediments and obstacles" (Ajzen, 1991, p. 188). In some studies, perceived behavioral control positively affects intentions (Conner et al., 2002; Kim et al., 2008; Verbeke & Vackier, 2005).

Perceived behavioral control has been considered one of the three variables that determine the customers' behavioral intention in the Theory of Planned Behavior (Fishbein & Ajzen, 1975). Based on the research of Wang et al. (2013), the perceived behavioral control can directly influence the consumers' purchasing behavior towards remanufactured products. Hence, the sixth hypothesis is:

H5: Perceived behavior control has a significant impact on purchase intention.

2.5 Perceived Quality

Quality is usually divided into objective and subjective aspects: "objective quality is the physical characteristics of products, and subjective quality is the quality as perceived by consumers" (Grunert, 2005, p. 371). Many consumers' perception of brands comes from the quality of products (Doyle, 2001). Perceived product quality is the most important factor influencing purchase decisions (Grunert, 2005; Verbeke et al., 2007). Perceived quality has long been considered a major factor in customer satisfaction (Boonlertvanich, 2019). Customers always tend to purchase products with lower quality variability (Batra & Sinha, 2000).

Many existing researches also proved a positive relation between perceived quality and purchase intention (e.g., Beneke et al., 2015; Sheau-Fen et al., 2012), which has been further confirmed by do Vale et al. (2016) that the perceived quality influence positively on people's purchase intention. Furthermore, the research of Konuk (2018) exhibited that perceived quality has a positive effect on customers' purchase intention. Hence, a hypothesis is indicated:

H6: Perceived quality has a significant impact on purchase intention.

2.6 Purchase Intention

Marketers proverbially consider purchase intention a primary determinant of purchase decisions (Raza et al., 2014). An important content of purchase intention is the trust level between the vendor and the buyer (Anderson & Agarwal, 2010; Liu et al., 2005). Purchase intention is when a consumer wants to (re)purchase services or products of the company (Han & Kim, 2010). The more subjective knowledge consumers have, the more likely they are to form an active purchase intention (Aertsens et al., 2011; Pieniak et al., 2010). Because the emotional value is intently related to brand-positive feelings, it increases the consumer's willingness to buy the brand again (Yu & Dean, 2001). Richardson et al. (1996) pointed out that consumers' purchase intention would increase with the increase in product category knowledge.

3. Research Methods and Materials

3.1 Research Framework

This study seeks to explore the factors influencing consumers' purchase intentions regarding new energy vehicles in Sichuan, China. The conceptual framework for this research draws upon previous theories and empirical studies, with all the relevant variables depicted in Figure 1. These variables are informed by key theories and include attitudes, trust, perceived risk, purchase attitude, perceived behavioral control, perceived quality, and purchasing intentions.

The initial framework is derived from the research conducted by Teng and Wang (2015), which delved into the relationships between trust and attitudes, trust and purchase intentions, as well as attitudes and purchase intentions. The second framework, as adopted by Wang et al. (2013), outlines the study's focus on the connections between perceived risk and purchase attitudes, purchase attitudes and purchase intentions, and perceived behavioral control and purchase intentions. Lastly, the research framework utilized by Yan et al. (2019) examined the relationship between perceived quality and purchase intentions

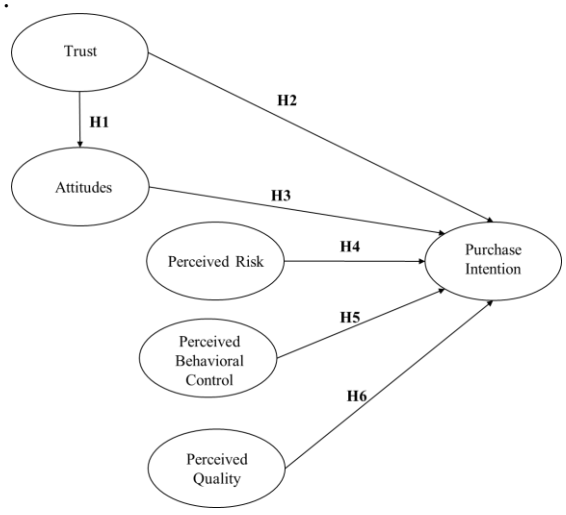

Figure 1: Conceptual Framework

H1: Trust has a significant impact on attitudes.
H2: Trust has a significant impact on purchase intention.
H3: Attitudes have a significant impact on purchase intention.
H4: Perceived risk has a significant impact on purchase intention.
H5: Perceived behavior control has a significant impact on purchase intention.
H6: Perceived quality has a significant impact on purchase intention.

3.2 Research Methodology

In this study, all participants were required to respond to all sections of the questionnaire presented to them. The questionnaire was developed by the researcher, administered to the respondents, and data were collected through an online platform. The questionnaire encompassed screening questions, measurement items, and demographic information.

For the assessment of item-objective congruence (IOC), experts were requested to rate each item on a scale of 1, 0, or -1. Following the evaluation by three experts, the scores for each item were incorporated into a formula to calculate the project-goal conformance indicator. The IOC rating form and the calculation details can be found in Appendix A. All 29 items scored equal to or above 0.67, indicating their validity for this research.

To enhance the reliability of the questionnaire, a pilot test was conducted by distributing it to 50 individuals interested in purchasing new energy vehicles and residing in Sichuan, China. Ultimately, the alpha coefficient for each construct in this study exceeded 0.6, affirming the reliability and suitability of these constructs as research instruments (Hair et al., 2003).

Following data collection, all information was saved and subsequently converted into SPSS data format. The primary objective of this investigation is to employ confirmatory factor analysis (CFA) and structural equation modeling (SEM).

3.3 Population and Sample Size

In this study, the target population was 18-30-year-old consumers who own or are interested in purchasing new energy vehicles in Sichuan, China. Boomsma (1985) mentioned that the minimum sample size requirement for using SEM should be around 100 to 200. Therefore, the most appropriate sample size decided by the researcher was 500.

3.4 Sampling Technique

This study gathered data through a combination of judgmental, convenience, and snowball sampling methods. Under judgmental sampling, the researcher deliberately chose participants from the pool of 31-60-year-old consumers in Sichuan, China, who either owned new energy vehicles or expressed an interest in purchasing them. Convenience sampling involved distributing questionnaires to individuals who were readily available and willing to participate in the research. Additionally, snowball sampling, while theoretically random, was employed as a practical and convenient method for participant selection.

4. Results and Discussion

4.1 Demographic Information

Based on the data presented in Table 1, the majority of respondents are male, accounting for 59.0%, while females make up 41.0% of the surveyed population. The largest occupational group is Government/Corporate Employees, comprising 48.8% of the respondents. Business Owners make up 20.4% of the population, followed by Self-Employed individuals at 13.2%. Retirees/Unemployed individuals account for 13.8% of the surveyed group, and there is a smaller proportion in the "Other" category (2.0%). Students represent only 1.8% of the population. The majority of respondents (62.8%) hold a Bachelor's degree. 19.0% of individuals have a Master's degree, while 9.0% possess a Doctorate degree. Those with education below a Bachelor's degree constitute 9.2% of the population. The income distribution among the surveyed individuals is majorly more than $2000: 53.8%.

Table 1: Demographic Profile

Demographic and General Data		31-60 Years old (n=500)	
		Frequency	Percentage
Gender	Male	295	59.0%
	Female	205	41.0%
Occupation	Student	9	1.8%
	Government/ Corporate Employee	244	48.8%
	Business Owner	102	20.4%
	Self-Employed	66	13.2%
	Retire/Unemployed	69	13.8%
	Other	10	2.0%
Education	Below Bachelor's Degree	46	9.2%
	Bachelor's Degree	314	62.8%
	Master's Degree	95	19.0%
	Doctorate Degree	45	9.0%
Income	Less than $500	7	1.4%
	$501 to $1000	23	4.6%
	$1001 to $1500	44	8.8%

Demographic and General Data		31-60 Years old (n=500)	
		Frequency	Percentage
	$1500 to $2000	157	31.4%
	More than $2000	269	53.8%

4.2 Confirmatory Factor Analysis (CFA)

Prior to examining the measurement model within the structural equation model (SEM), we conducted Confirmatory Factor Analysis (CFA). The CFA results underscored the significance of all items within each variable, as evidenced by their substantial factor loadings, providing robust support for the concept of discriminant validity. We followed the guidelines set out by Stevens (1992), considering an item satisfactory when its loading exceeded 0.40, accompanied by a p-value below 0.05 for Confirmatory Factor Analysis.

Furthermore, in accordance with the recommendations of Fornell and Larcker (1981), we took into consideration that while an Average Variance Extracted (AVE) value below 0.5 might be deemed acceptable, it is essential to maintain a Composite Reliability (CR) above 0.6 to ensure the construct's convergent validity remains robust.

Table 2: Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
1. Trust	Chawla and Joshi (2019)	6	0.895	0.657-0.819	0.896	0.591
2. Attitudes	Chawla and Joshi (2019)	5	0.817	0.649-0.730	0.818	0.474
3. Perceived Risk	Wang et al. (2013)	6	0.875	0.475-0.871	0.826	0.544
4. Perceived Behavioral Control	Lee et al. (2011)	4	0.823	0.665-0.796	0.826	0.544
5. Perceived Quality	Yan et al. (2019)	4	0.772	0.619-0.732	0.774	0.463
6. Purchase Intention	Teng and Wang (2015)	4	0.835	0.717-0.779	0.836	0.560

Table 3 presents various indices utilized for evaluating model fit within the context of Confirmatory Factor Analysis (CFA) testing. For 31-60 years old, the computed values offer an assessment of model fit in the Confirmatory Factor Analysis (CFA) testing. The calculated values for these indices are as follows: CMIN/DF = 1.540, GFI = 0.929, AGFI = 0.915, NFI = 0.917, CFI = 0.969, TLI = 0.965, and RMSEA = 0.033. These values serve as indicators of how well the model aligns with the observed data.

Table 3: Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	≤ 5.00 (Marsh et al., 2004)	557.377/362 = 1.540
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.929
AGFI	≥ 0.80 (Sica & Ghisi, 2007)	0.915
NFI	≥ 0.80 (Wu & Wang, 2006)	0.917
CFI	≥ 0.80 (Bentler, 1990)	0.969
TLI	≥ 0.80 (Sharma et al., 2005)	0.965
RMSEA	≤ 0.08 (Pedroso et al., 2016)	0.033
Model summary		**In harmony with empirical data**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, NFI = Normed fit index, CFI = Comparative fit index, TLI = Tucker–Lewis index and RMSEA = Root mean square error of approximation

Following the framework laid out by Fornell and Larcker (1981), the assessment of discriminant validity involved the calculation of the square root of each Average Variance Extracted (AVE). Consistent with the findings of this analysis, the computed values for discriminant validity exceeded all inter-construct or inter-factor correlations, providing strong reinforcement for the credibility of the discriminant relationships. With both convergent and discriminant validity firmly established, the collected evidence serves as robust support for confirming the validity of the constructs under investigation.

Table 4: Discriminant Validity

	PQ	T	ATT	PR	PBC	PI
PQ	**0.680**					
T	0.184	**0.769**				
ATT	0.626	0.252	**0.689**			
PR	-0.050	-0.052	-0.042	**0.744**		
PBC	0.590	0.178	0.605	-0.028	**0.738**	
PI	0.323	0.119	0.432	-0.056	0.378	**0.748**

Note: The diagonally listed value is the AVE square roots of the variables

Source: Created by the author.

4.3 Structural Equation Model (SEM)

To compute these fit indices and refine the model, SPSS AMOS was employed in this study. The results indicate a good fit, as indicated by the following fit indices: For the 31-60 years old, CMIN/DF = 3.178, GFI = 0.856, AGFI = 0.831, NFI = 0.806, CFI = 0.858, TLI = 0.844, and RMSEA = 0.066. For the 31-60 years old, CMIN/DF = 2.412, GFI = 0.889, AGFI = 0.870, NFI = 0.867, CFI = 0.917, TLI = 0.909, and RMSEA = 0.053. These computed values were then compared against the acceptable thresholds outlined in Table 5 to rigorously assess the model's fit with the observed data.

Table 5: Goodness of Fit for Structural Model

Index	Acceptable	Statistical Values
CMIN/DF	≤ 5.00 (Marsh et al., 2004)	894.748/371 = 2.412
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.889
AGFI	≥ 0.80 (Sica & Ghisi, 2007)	0.870
NFI	≥ 0.80 (Wu & Wang, 2006)	0.867
CFI	≥ 0.80 (Bentler, 1990)	0.917
TLI	≥ 0.80 (Sharma et al., 2005)	0.909
RMSEA	≤ 0.08 (Pedroso et al., 2016)	0.053
Model summary		**In harmony with empirical data**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, NFI = Normed fit index, CFI = Comparative fit index, TLI = Tucker–Lewis index and RMSEA = Root mean square error of approximation

4.4 Research Hypothesis Testing Result

In the context of SEM, the analysis of standardized coefficient values and associated t-values, as depicted in Table 6, provided key insights and findings. These coefficient values represent the strength and direction of relationships between variables, while the t-values indicate the significance of these relationships. Specifically, it means that the relationships between variables that were examined in the study demonstrated statistical significance at a significance level of 0.05 or lower. In other words, the observed associations between variables were unlikely to have occurred by random chance, providing evidence in favor of the stated hypotheses.

Table 6: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-Value	Result
H1: T→ATT	0.252	4.727*	Supported
H2: T→PI	0.004	0.069	Not Supported
H3: ATT→PI	0.310	5.356*	Supported
H4: PR →PI	-0.039	-0.791	Not Supported
H5: PBC→PI	0.203	3.844*	Supported
H6: PQ→PI	0.073	1.380	Not Supported

Note: * p<0.05
Source: Created by the author

The relevant statistical data for H1 supported the hypothesis of a significant impact of trust on attitudes with a standardized coefficient value of 0.252. In the structured method, the standardized route coefficient value is 0.004, and H2 has been failed to validate a significant impact of trust on purchase intention. According to H3 analysis findings, attitudes have a significant impact on purchasing intention, with a standardized path coefficient value is 0.310. The statistical results of H4 support the hypothesis that perceived risk did not impact purchase intention with a standardized coefficient value of -0.039. In H5, the perceived behavior control significantly influences the purchase intention with a standardized path coefficient 0.203. H6 shows that perceived quality dose not significantly impact purchase intention with the standard coefficient value of 0.073.

5. Conclusion and Recommendation

5.1 Conclusion and Discussion

The objective of this research was to explore the factors influencing consumers' purchase intentions concerning new energy vehicles in Sichuan, China, utilizing a conceptual framework encompassing six key variables: trust, attitudes, perceived risk, perceived behavioral control, perceived quality, and purchase intention. The study employed quantitative research methods and collected data from a sample of 500 respondents aged 31 to 60 who either owned or expressed an interest in purchasing new energy vehicles. Data were gathered through a combination of judgmental, convenience, and snowball sampling methods. The primary analytical tools utilized were confirmatory factor analysis (CFA) and structural equation modeling (SEM).

The study yielded several noteworthy findings. Firstly, trust was identified as a significant factor influencing consumer attitudes. This suggests that building and maintaining trust is crucial for organizations in the new energy vehicle market to shape positive consumer perceptions.

Secondly, the study revealed that purchase intention was significantly impacted by consumer attitudes and perceived behavioral control. This implies that not only do consumers' attitudes play a pivotal role in their willingness to purchase new energy vehicles, but their perception of their ability to control the purchase process also significantly affects their intentions.

Interestingly, perceived risk and perceived quality were found to have no significant direct impact on purchase intention in this context. While this may seem counterintuitive, it could suggest that in the realm of new energy vehicles in Sichuan, China, consumers prioritize other factors such as trust, attitudes, and perceived behavioral control over concerns about risk and quality.

The findings of this study have important implications for businesses operating in the new energy vehicle market in Sichuan, China. Recognizing the significance of age as a determinant in consumer decisions, as evidenced by the age-specific sample group, can be instrumental in tailoring marketing and engagement strategies. Different age groups may have distinct preferences and priorities when it comes to new energy vehicles. Therefore, organizations should consider crafting targeted messaging and product offerings that resonate with the values and expectations of consumers

across various age brackets.

Furthermore, the emphasis on trust as a significant influencer of consumer attitudes underscores the importance of transparent and ethical business practices in the industry. Building and maintaining trust should be a core objective for companies seeking to thrive in this market.

Additionally, the finding that perceived risk and perceived quality do not directly impact purchase intention suggests that businesses should focus on other factors, such as improving consumer attitudes and enhancing perceived behavioral control, to boost purchase intent among potential buyers of new energy vehicles in Sichuan, China.

In summary, this research provides valuable insights into the factors that shape consumer purchase intentions in the new energy vehicle market and offers practical recommendations for organizations aiming to better understand and cater to the preferences of their target audience in Sichuan, China.

5.2 Recommendation

Based on the findings and conclusions of this research, several recommendations can be made to guide businesses and policymakers in the new energy vehicle (NEV) industry in Sichuan, China:

Given the significant influence of trust on consumer attitudes, businesses in the NEV market should prioritize building and maintaining trust with their customers. This can be achieved through transparent communication, ethical business practices, and delivering on promises. Establishing trust can foster positive attitudes and ultimately drive purchase intentions.

Recognize the impact of age on consumer decisions. Tailor marketing and product offerings to resonate with the values and preferences of different age groups within the 31 to 60-year-old demographic. Conduct market research to understand the specific needs and priorities of consumers in various age brackets and adjust strategies accordingly.

As perceived behavioral control significantly influences purchase intention, businesses should focus on enhancing consumers' perception of their ability to control the purchase process. This may involve simplifying the buying process, offering financing options, providing clear information, and ensuring a smooth and convenient customer experience.

While perceived risk and perceived quality were not found to have direct impacts on purchase intention in this study, it's essential for businesses not to neglect these factors. Invest in strategies that reduce perceived risk, such as offering warranties, safety assurances, and clear product information. Simultaneously, work on improving perceived quality through product innovation, quality control, and customer testimonials.

Consumer preferences and market dynamics can change over time. Therefore, it's crucial for businesses to continuously monitor consumer sentiment, industry trends, and competitive developments. Be prepared to adapt strategies and offerings to remain competitive and meet evolving consumer needs.

Given the focus on new energy vehicles, emphasize sustainability in both product design and corporate practices. Highlight the environmental benefits of NEVs, such as reduced emissions and energy efficiency. Demonstrate a commitment to sustainability, which can resonate with environmentally conscious consumers.

Encourage collaboration within the NEV industry to foster innovation. Collaborations between manufacturers, technology companies, and government agencies can lead to advancements in NEV technology, infrastructure, and consumer education.

Engage with government authorities and advocate for supportive policies and incentives for NEV adoption. Government initiatives, such as subsidies, tax incentives, and charging infrastructure development, can significantly impact the growth of the NEV market.

Invest in consumer education initiatives to raise awareness about the benefits of new energy vehicles, address misconceptions, and inform potential buyers about available incentives and support.

By implementing these recommendations, businesses and policymakers can better navigate the complex landscape of the new energy vehicle market in Sichuan, China, and drive increased consumer interest and adoption of sustainable transportation options.

5.3 Limitation and Further Study

While this research provides valuable insights into the factors influencing consumers' purchase intentions regarding new energy vehicles (NEVs) in Sichuan, China, it is essential to acknowledge its limitations to ensure a comprehensive understanding of the study's scope and potential areas for future research:

1. **Sampling Bias:** The study's sample consisted of individuals aged 31 to 60 who own or have an interest in purchasing NEVs. This age group may not fully represent the diversity of consumer preferences, and the findings may not be generalizable to younger or older demographics.

2. Regional Focus: The study specifically focused on Sichuan, China, and its findings may not be directly applicable to other regions within China or other countries with different cultural, economic, and regulatory contexts.

3. Limited Variables: The study concentrated on a specific set of variables, including trust, attitudes, perceived risk, perceived behavioral control, perceived quality, and purchase intention. Other potential influencing factors, such as government policies, environmental awareness, and peer influence, were not extensively examined.

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