

## The Influence of Consumer Ethnocentrism on Intention Toward Domestic Electric Vehicle Selection

### *Tüketici Etnosentrizminin Yerli Elektrikli Araç Seçimine Yönelik Niyet Üzerindeki Etkisi*

#### Abstract




Previous studies mostly investigated the individuals' self-interested factors or functional attributes and intention toward purchasing electric vehicles based on the theory of planned behavior. Nevertheless, those studies neglected the irrational or impulsive factor which is consumer ethnocentrism influence on individuals' decision-making processes. The current study aims to examine the relationship between consumer ethnocentrism, attitude, subjective norm, perceived behavioral control, and intention toward purchasing electric vehicles. A quantitative approach was applied using a survey technique involving 288 respondents. The proposed hypotheses were empirically tested with Statistical Package for Social Science and Analysis of Moment Structures (AMOS). The results showed that consumer ethnocentrism positively influenced attitude, subjective norm, perceived behavioral control, and intention. Attitude, subjective norm, and perceived behavioral control positively influenced intention. Meanwhile, attitude had a mediating role between subjective norm and intention, and subjective norm had a mediating role between consumer ethnocentrism and intention. This study extends the existing knowledge on how consumer ethnocentrism influences consumer intention to purchase electric vehicles in the marketing literature.

**Keywords:** *Attitude, consumer ethnocentrism, electric vehicles, perceived behavior control, subjective norm*

#### Öz

Önceki çalışmalar, planlı davranış teorisine dayalı olarak çoğunlukla bireylerin kişisel çıkar faktörlerini veya işlevsel özelliklerini ve elektrikli araç satın alma niyetini araştırıyordu. Bununla birlikte, bu çalışmalar, tüketici etnosentrizminin bireylerin karar verme süreçleri üzerindeki etkisi olan irrasyonel veya dürtüsel faktörü ihmal etmiştir. Mevcut çalışma, tüketici etnosentrizmi, tutum, öznel norm, algılanan davranışsal kontrol ve elektrikli araç satın alma niyeti arasındaki ilişkiyi incelemektedir. 288 katılımcıyı içeren bir anket tekniği kullanılarak nicel bir yaklaşım uygulanmıştır. Önerilen hipotezler, Statistical Package for Social Science and Analysis of Moment Structures (AMOS) ile ampirik olarak test edilmiştir. Sonuçlar, tüketici etnosentrizminin tutumu, öznel normları, algılanan davranışsal kontrolü ve niyeti olumlu yönde etkilediğini göstermektedir. Tutum, öznel norm ve algılanan davranışsal kontrol, niyeti olumlu yönde etkilemektedir. Bu arada, tutum, öznel norm ile niyet arasında aracı bir role sahipken, öznel norm, tüketici etnosentrizmi ile niyet arasında aracı bir role sahiptir. Bu çalışma, pazarlama literatüründe tüketici etnosentrizminin tüketicinin elektrikli araç satın alma niyetini nasıl etkilediğine dair mevcut bilgileri genişletmektedir.

**Anahtar Kelimeler:** *Tüketici etnosentrizmi, tutum, öznel norm, algılanan davranışsal kontrolü, elektrikli araçlar.*

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#### Introduction

With the rapid economic development of China, the problems of energy crisis and air pollution need to be solved urgently (Wang et al., 2020c). Compared with traditional fuel vehicles, electric vehicles (EV) are regarded as promising transportation tools

(Xiao et al., 2019) and considered as an effective way to solve environmental-related issues. Wang et al. (2017) suggested that using EV is one of the most promising methods to alleviate the serious environment problems such as carbon emissions. The industry of EV is viewed as one of the most important emerging industries, and specifically, the scale of production of sales of Chinese EV has become the largest in the world (Huang & Qian, 2018). In mid-2019, the sales of domestically produced EV in China reached 617,000 units and increased by 49.6% over last year (Gao et al., 2020). Consumers expressed an extremely positive image and performance toward EV (Hur et al., 2013).

Consumer ethnocentrism (CE) refers to the beliefs held by consumers about the appropriateness and indeed the morality of purchasing foreign-made products (Shimp & Sharma, 1987). Previous studies used a variety of different theoretical models to investigate the factors influencing the purchase of EV, including plug-in hybrid EV, hybrid EV, and battery EV; for example, Wu et al. (2019) understood the public acceptance of EV through the application of the technology acceptance model. Frugality and "mianzi," two psychological factors, were introduced into the theory of customer perceived value to explore the influence on purchase intentions of EV (Chen et al., 2019). Alzahrani et al. (2019) identified the factors between purchase intention of EV and new technology in Saudi Arabia. Among previous studies, theoretical frames mainly were based on the theory of planned behavior (TPB) which successfully predicted the consumer purchase intention of EV (Asadi et al., 2021; Huang & Ge, 2019; Tu & Yang, 2019). Generally, CE has a positive impact on the intention to purchase domestic products and a negative impact on the intention toward foreign products and services (Nikodemska-Wolowik & Bednarz, 2019; Wang et al., 2021b).

Nevertheless, CE influences consumer purchasing behavior in different product categories (Chryssochoidis et al., 2007; Evanschitzky et al., 2008). The impact of CE on purchasing domestic products may vary depending on various factors, such as the development level of country and the quality and availability of domestic products (Akbarov, 2021). Specifically, people from developed countries generally have high CE and prefer domestic products and people from developing countries usually have low CE and think the domestic products are lower than the imported products because of the backward economy and technology (Bernabeu et al., 2020; Ricci et al., 2019; Xin & Seo, 2019). China, as a developing country, has become the largest consumer market in 2016; other countries are concerned about the Chinese rise in CE which could pose a serious threat to foreign brands (Bi et al., 2012; Chang & Cheng, 2011). For instance, Chinese consumers' purchase attitude of domestic products can be affected by CE, and their high ethnocentric faith makes it difficult for them to accept foreign products on moral grounds (He & Wang, 2015; Qing et al., 2012). However, some investigations found that CE has no significant influence on Chinese consumers' intention of domestic products (Tong & Li, 2013; Tsai et al., 2013). Hence, previous studies' results showed inconsistent findings, this could be caused by

the preferences of consumers for domestic on foreign products being product-specific (Ding, 2017; Maksan et al., 2019).

In addition, pertaining to Chinese consumers' CE impacts on EV purchasing attitude or intention, most of the previous studies adopted TPB and focused more on self-interested factors and were dependent on the perception of instrumental or functional attributes, such as EV performance and convenience of use (Wang & Liu, 2018), price and EV usage (Zhuge et al., 2019), environmental concern (Wu et al., 2019), product perception, and cognitive status (Huang & Ge, 2019). Most of those studies regarded the adoption of EV purchasing behavior as a rational process and a self-interested choice. Researchers demonstrated that although TPB has been successful in the role of predicting and understanding human behavior, it lacks subconscious, associative and impulse factors, feeling, and private standards (Ulker-Demirel & Ciftci, 2020; Wang et al., 2021a). Thus, previous studies ignored the irrational factors like CE which may lead consumers to overestimate domestic products (Asadi et al., 2021; Ding, 2017). Considering that the study of China on CE as a progressing concept is still in its infancy (Makanyeza & du Toit, 2017), there is limited research that evaluates the impact of CE on Chinese consumers' purchase behavior of domestic EV. The current study aims to integrate the TPB from the self-interest motive with the CE from an irrational perspective to investigate Chinese consumers' intention to purchase EV.

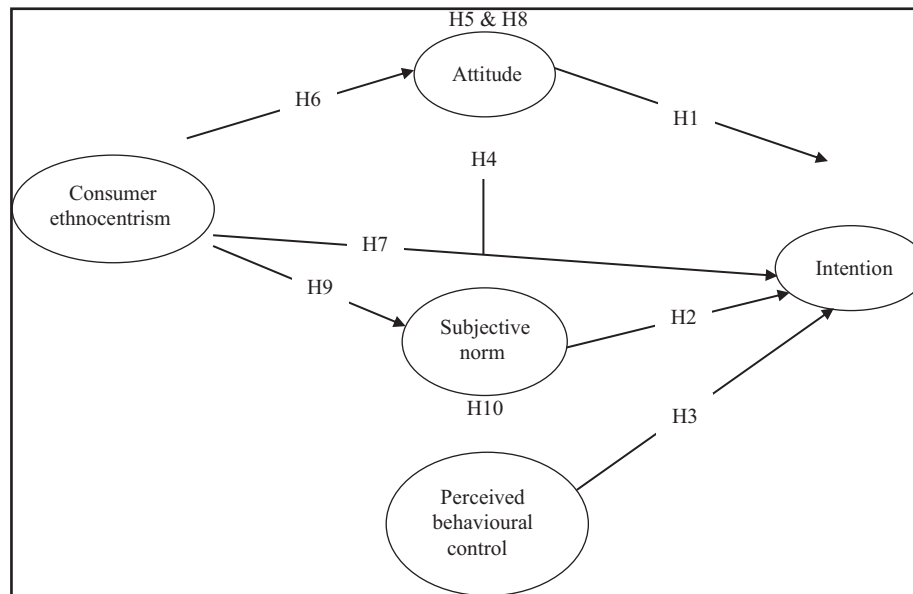
### Theoretical Background and Hypothesis Development

#### Attitude, Subjective Norm, and Perceived Behavioral Control

This study adopts a theoretical model of TPB to predict the purchase intention of domestic EV (Figure 1). The TPB is different from other research models in that it covers the full range of individuals and social behavior (Wang et al., 2021b). There are three conceptually independent variables of intention to perform a given behavior: attitude, subjective norm (SN), and perceived behavioral control (PBC) (Ajzen, 1991). Attitude refers to the consumers' overall evaluation of specific behavior. In other words, an attitude can be essentially pleasant or unpleasant or a pro-con evaluation (Wang et al., 2019). It reflects an individual's preference or state of mind that remains unchanged in relation to a particular behavior or viewpoint (Wang et al., 2020b). Subjective norm is the social driving force of perceived opinions of significant others that decides whether to perform a certain behavior (Wang et al., 2021b). Consumers who believe that their significant others (e.g., relatives, coworkers, and close-friends) support their intention to buy certain products or services will be more likely to adopt them, while the consumers' significant others do not send the same signal (Wang et al., 2021a). Perceived behavioral control is defined as the degree of ease or difficulty perceived by a person with respect to performing the behavior (Ajzen, 1991). Consumers tend to perform a particular behavior when the difficulty of performing it can be served. Ultimately, attitude, SN, and PBC influence one's intention to make certain decision-making. Intention is a center concept of TPB, which described as a cognitive motivation to perform a certain behavior through personal effort (Wang et al., 2020a). In the marketing literature, intention is

**Figure 1.**

**Conceptual Research Model.** Note: H5 denotes that subjective norm influences intention via attitude; H8 denotes that consumer ethnocentrism influences intention via attitude; H10 denotes that consumer ethnocentrism influences intention via subjective norm.



the single-most important predictor of an individual's actual behavior and is considered a precursor and the best antecedent of actual behavior (Wang et al., 2019).

Previous studies postulated the significant role of attitude, SN, and PBC in influencing consumer behavior toward domestic products or EV in diverse settings; for example, Vabø et al. (2017) showed that SN and PBC have a positive influence on consumers' intention to buy domestic food. Attitude and PBC positively influenced consumers' intention to purchase Korean functional foods in China, and Maksan et al. (2019) found that attitude has the strongest effect on the purchase intention of domestic wine and even partly regulates the relationship between CE and intention. In addition, Shalender and Sharma (2021) found that attitude, SN, and PBC have a significant connection with the adoption of EV in predicting purchase intention in India. Wang et al. (2016) indicated that attitude, SN, and PBC positively influenced consumers' EV purchase intention, and all variables played a mediation role between CE and intention among Chinese consumers. Thus, the following hypotheses are proposed:

H1: There is a positive significant relationship between attitude and intention.

H2: There is a positive significant relationship between SN and intention.

H3: There is a positive significant relationship between PBC and intention.

Some researchers argued that studies should consider that SN can affect the consumers' intention to purchase products or services when applying TPB (Wang et al., 2021a; Wang & Wong, 2020). Especially, unlike most western countries, Asian countries such as South Korea, Japan, and China are highly collectivist societies, and friends and family around people can affect their attitude toward a particular object (Wang & Wong, 2020). This is in line with the study results of Bashir et al. (2019), although the existing practices within TPB do not confirm any role of mediation; the possibility of mediation cannot be ignored in the marketing literature. Certain study results indicated how SN influences intention via attitude to purchase products or services (Han et al., 2010; Wang et al., 2021a; Wang & Wong, 2020). For example, Tarkiainen and Sundqvist (2005) found that SN has no significant relationship with intention, but there is a significant path that exists between SN and attitude. Wang and Wong (2020) found that attitude plays a full mediational role between SN and intention to visit green hotels, while in another study, Wang et al. (2021a) reported that SN positively and indirectly influences intention to visit a space-launch tourism site through attitude in China. Thus, the following hypotheses are proposed:

H4: There is a positive significant relationship between SN and attitude.

H5: Attitude mediates the relationship between SN and intention.

### Consumer Ethnocentrism

Consumer ethnocentrism is often satisfied with the cognitive, emotional, and normative attitudes of domestic products or services (Wang et al., 2021b). Highly ethnocentric consumers believe that buying imported products harms the economy of country and causes unemployment and then consumers with high CE tendencies will portray unfavorable attitude toward imported products and services (Ding, 2017; Xin & Seo 2019). High levels of CE will make consumers assess foreign products in a negative way and ascribe a much higher quality to domestic products, and eventually the attitude and intentionality will be changed (Yildiz et al., 2018). Thus, consumers with high CE can overestimate the goods or actively buy domestic products on moral grounds (Wang et al., 2021b). Specifically, consumers who are in developing countries often choose domestic products to protect and support their economy and regard the purchase as an altruistic helping behavior (Tsai, 2010). In their study, Maksan et al. (2019) showed that CE positively influences consumers' attitudes and intention toward the purchase of domestic wine in Croatia; meanwhile, attitude plays a mediating role between CE and intention. Thomas et al. (2020) reported that CE has a significant influence on Indian consumers' attitude and then affects their purchase decision of a car. Hence, the following hypotheses are proposed:

H6: There is a positive significant relationship between CE and attitude.

H7: There is a positive significant relationship between CE and intention.

H8: Attitude mediates the relationship between CE and intention.

Regarding the purchase of domestic EV, individuals' significant others' opinions (e.g., family members, relatives, business partners, and colleagues) can be influenced by CE, which could be explained by two aspects. First, people around the consumers analyze the knowledge of domestic EV and conclude that the imported EV perform better (Ding, 2017), but there is a negative relation between CE and the complexity of product knowledge. This means that consumers with high CE have a lower desire to understand the cognitive structures of foreign products (Seitz & Roosen, 2015). Consumers are unwilling to accept the recommendation of foreign EV and in contrast, willing to learn something related to domestic EV from people around them. Second, as China is a highly collectivistic country (Wang et al., 2021a), Chinese consumers hear other significant referents' voices to support domestic products, and consumers with high CE would strengthen the purchase intention of domestic EV. Therefore, it is expected that CE can increase Chinese consumers to purchase domestic EV, and the following hypotheses are proposed:

H9: There is a positive significant relationship between CE and SN.

H10: Subjective norm mediates the relationship between CE and intention.

### Research Methods

#### Data Collection

This study is an explanatory study, with the population being respondents from Shanghai, China, at the Second Shanghai New Energy Auto Show (Shanghai Auto Expo) from June 12 to 14, 2021. Shanghai is the political and economic capital of China, and people from all over the country come here for participating in various expositions. Most people have a preliminary understanding of the performance of EV, and all the brands of EV can be found at this show. Based on the temporal characteristics, the Chinese Dragon Boat Festival which is one of the longest holidays usually comes in June based on the traditional Chinese calendar. Chinese consumers mostly like to perform purchasing activities (e.g., shopping and traveling) during this time, making it easier to collect data that is more representative of the population.

Convenience sampling with the mall intercept method was used in this study for data collection as it provides a high response rate to the research and has been proven to be effective in previous studies (Ding, 2017; Maksan et al., 2019). Hair et al. (2010) noted that a sample size greater than 200 offers an adequate margin of error; meanwhile, some researchers recommended that a sample size of at least 200 or between 10 and 20 cases per parameter is appropriate for using a structural equation modeling (SEM) (Kline, 2015; Wang & Zhang, 2021). Considering the vast number of visitors to the Shanghai Auto Expo and the fact that it is only a three-day show, ten university students were assigned to distribute 300 questionnaires. The entire EV exhibition area was divided into two areas according to the attributes of local vs foreign EV brands; in this way, it ensures a good uniformity of respondents in terms of levels of CE. Finally, a total sample of 288 respondents was used for data analysis from the two regions. In addition, a pilot test was carried out on a sample of 30 respondents to ensure the usability and validity of the developed instrument and to avoid any potential confusions and inaccuracies (Connelly, 2008; Hill, 1998).

#### Measurement and Survey Questionnaire Development

The questionnaire was designed in an established, self-administered, and close-ended format. There were three sections which were used to gather empirical data based on previous studies, and all items were measured using a 5-point Likert scale, with responses ranging from 1 (strongly disagree) to 5 (strongly agree). The first section includes the variable of CE which was measured using six items from Maksan et al. (2019). The second section of the questionnaire includes the TPB model; all variables were adapted from Asadi et al. (2021) and Huang and Ge (2019). Four items were used to measure attitude, SN, and PBC, and 3 items were used to measure intention. The last section of the questionnaire included demographic variables, including age, gender, education level, and income.

## Data Analysis and Result

In this research, Statistical Package for Social Science 22 was utilized for the descriptive statistics and exploratory factor analysis (EFA). Then, confirmatory factor analysis (CFA) and SEM test were carried out to verify the relationship between the variables through AMOS.

## Descriptive Statistical Analysis and Exploratory Factor Analysis

Of those 288 respondents, approximately 52.8% were male and 47.2% were female. Most of those respondents were aged between 18 and 30 years and 48.6% of the respondents had completed a 4-years bachelor's degree. About 31.9% of those respondents reported a monthly income between 3001 and 4500 Chinese Yuan. From the EFA process, the Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity results showed that the KMO measure of sampling adequacy is  $0.891 > 0.7$ .

The approximate chi-square is  $3629.424$ ,  $df=231$ ,  $p=.000 < .05$ . Thus, the results showed that the data were approximate for performing further analysis.

## Confirmatory Factor Analysis

According to Hair et al. (2010), the rule of thumb in assessing the practical significance of standardized factor loadings should be at least 0.5 or ideally more than 0.7. Thus, after dropping off the low factor loading (i.e., PBC1), all factor loadings exceeded 0.5. Hinkin et al. (1997) suggested that an indication of strong item covariance or homogeneity content with a reliability coefficient of 0.7 and above was acceptable (Hair et al., 2010; Kerlinger, 1966). Then, the reliability statistics for this study showed that Cronbach's alpha values were all greater than 0.7. According to the study of Hair et al. (2010), convergent validity test should meet the following criteria: the average loading value should be greater than 0.5; the average variance

**Table 1.**  
*Construct Validity for the Proposed Model*

Construct (Cronbach's Alpha)	Item	Item Loading	CR	AVE
Consumer ethnocentrism ( $\alpha=0.890$ )	CE1. Chinese products first, last, and foremost	0.731	0.887	0.568
	CE2. Chinese should always buy Chinese products instead of imports	0.807		
	CE3. It is always best to purchase Chinese products	0.811		
	CE4. There should be very little trading or purchasing of products from other countries unless out of necessity	0.652		
	CE5. It may cost me in the long run, but I prefer to support Chinese products	0.761		
	CE6. We should purchase products manufactured in China instead of letting other countries get rich off us	0.749		
Attitude ( $\alpha=0.856$ )	ATT1. Buying domestic EV is pleasure for me	0.800	0.863	0.614
	ATT2. Buying domestic EV evokes positive emotions in me	0.881		
	ATT3. Buying domestic EV is complete ritual for me	0.796		
	ATT4. Buying domestic EV is funny	0.637		
Subjective norm ( $\alpha=0.840$ )	SN1. My friends approve my purchase of domestic EV	0.855	0.841	0.572
	SN2. My colleagues approve my purchase of domestic EV	0.753		
	SN3. My friends buy EV	0.638		
	SN4. My colleagues buy EV	0.763		
Perceived behavioral control ( $\alpha=0.792$ )	PBC2. I expect I will be able to buy domestic EV	0.769	0.756	0.510
	PBC3. For me purchase domestic EV is simple.	0.628		
	PBC4. If I want it, I believe I can purchase domestic EV	0.739		
Intention ( $\alpha=0.838$ )	Inten1. I intend to buy domestic EV	0.914	0.840	0.577
	Inten2. I am planning to buy domestic EV	0.855		
	Inten3. I will probably buy domestic EV	0.645		
	Inten4. I am more likely to buy domestic EV over a foreigner EV brand	0.571		

Note: AVE = average variance extracted; CR = composition of reliability; EV = electric vehicles.



**Table 2.**  
*Discriminate Validity for the Proposed Model*

Research Construct	CR	AVE	MSV	ASV	1	2	3	4	5
1. Consumer ethnocentrism	0.887	0.568	0.386	0.259	0.773				
2. Attitude	0.863	0.614	0.345	0.277	0.555	0.784			
3. Subjective norm	0.841	0.572	0.245	0.207	0.468	0.447	0.756		
4. Perceived behavioral control	0.756	0.510	0.256	0.187	0.349	0.506	0.407	0.714	
5. Intention	0.840	0.577	0.386	0.295	0.621	0.587	0.495	0.452	0.760

Note: AVE = average variance extracted; CR = composition of reliability.

extracted (AVE) should be greater than 0.5; the composition of reliability (CR) should be greater than 0.7, and CR should be greater than the AVE. As shown in Table 1, all the values of average loading, CR, and AVE indicated that the questionnaire had a good convergent validity. This study further did a discriminant validity test, and the result showed that both the maximum shared squared variance (MSV) and the average shared squared variance (ASV) were less than the AVE, indicating good discriminant validity (Hair et al., 2010) (Table 2).

Next, the model fit was evaluated using the following alternative measures: chi-square/*df* (CMIN/*df*) < 3.0 is good or < 5.0 is acceptable. The results showed that CMIN/*df* is 1.812. An adjusted goodness-of-fit index (AGFI) > 0.8 is good, an incremental fit index (IFI) > 0.9 is good, a comparative fit index (CFI) > 0.9 is good, the parsimony normed fit index (PNFI) should be greater than 0.5, and the root mean square error of approximation (RMSEA) < 0.08 is good

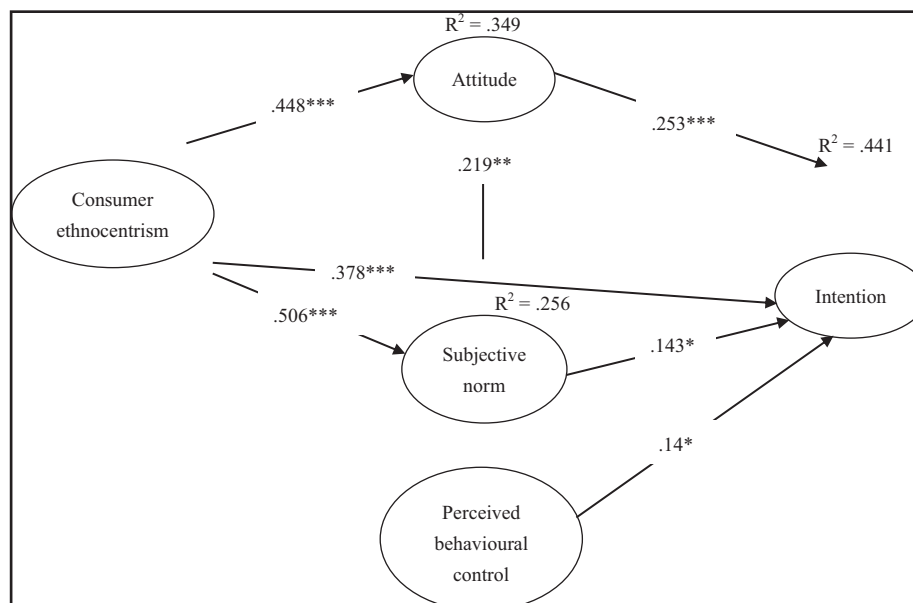
(Hair et al., 2010; Meyers et al., 2016). The results showed that AGFI=0.877, IFI=0.958, CFI=0.958, PNFI=0.764, and RMSEA=0.053. Thus, the model fit values were all at the acceptable thresholds.

### Structural Equation Modeling

The next step was to perform SEM using the model to test the hypotheses. The overall GFIs of the structural model were: CMIN/*df*=2.154, AGFI=0.858, PGFI=0.689, CFI=0.939, GFI=0.890, IFI=0.939, NFI=0.892, PNFI=0.761, PCFI=0.8, and RMSEA=0.063. The data show a good fit of the structural model. This step is illustrated in Figure 2 and Tables 3 and 4.

The results of the standardized regression weights to test the hypotheses are shown in Table 3 and Figure 2 and revealed that all the hypotheses of the extended TPB model were accepted. Attitude and intention were positively corrected ( $\beta=0.348$ ,  $p$

**Figure 2.**  
*Structural Model Results. Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ , critical ratio > 1.96.*



**Table 3.**  
*Structural Relationships and Hypothesis Testing for the Proposed Model*

Hypothesis	Parameter	$\beta$	CR	$p$	Decision
H1	Attitude → Intention	0.253	3.639	***	Supported
H2	Subject norm → Intention	0.143	2.148	.032	Supported
H3	Perceived behavior control → Intention	0.14	2.457	.014	Supported
H4	Subject norm → Attitude	0.219	3.065	.002	Supported
H6	Consumer ethnocentric → Attitude	0.448	5.872	***	Supported
H7	Consumer ethnocentric → Intention	0.378	4.981	***	Supported
H9	Consumer ethnocentric → Subject norm	0.506	7.013	***	Supported

Note: CR=composition of reliability.  
\*\*\* $p < .001$ .

$p < .001$ ); thus, H1 was accepted; SN and intention were positively correlated ( $\beta=0.143$ ,  $p < .05$ ); thus, H2 was accepted; PBC and intention were positively correlated ( $\beta=0.14$ ,  $p < .05$ ); thus, H3 was accepted; attitude and SN were positively correlated ( $\beta=0.219$ ,  $p < .05$ ); thus, H4 was accepted; CE was found to

have a positive and significant impact on attitude ( $\beta=0.448$ ,  $p < .001$ ); thus, H6 was accepted; CE positively influences intention ( $\beta=0.378$ ,  $p < .001$ ); thus, H7 was accepted; CE and SN were positively and significantly correlated ( $\beta=0.506$ ,  $p < .001$ ); thus, H9 was accepted.

On the other hand, the obtained results from Table 4 also show that attitude was fully mediated between SN and intention (the direct effects were not significant and the indirect effects were significant at 0.051,  $p < .05$ ) and SN was partially mediated between CE and intention (the direct effects were significant at 0.548 and the indirect effects were significant at 0.165,  $p < .001$ ). Therefore, H5 and H10 were confirmed, while H8 was rejected.

### Discussion and Conclusion

This study examined the extended framework of the TPB model which added CE as the antecedent of intention to purchase EV. In addition, this study tested the mediating role of attitude and SN in the relationship between CE and intention. The results showed that CE had a strong predictive effect on attitude and SN. Consumer ethnocentrism explained the variance of 25.6% in SN. Consumer ethnocentrism and SN explained the variance of 34.9% in attitude. This indicated that highly ethnocentric consumers have more positive purchase attitudes and SN toward purchasing domestic EV; these findings are in line with the previous studies (Ding, 2017; Han & Guo, 2018; Maksan et al., 2019; Thomas et al., 2020). The result suggests that SN plays a partial mediating role in the relationship between CE and intention. This means that high CE positively influences consumers' SN, subsequently, consumers who received positive suggestions about domestic EV leading a stronger consumer intention to purchase domestic EV. (Maksan et al., 2019).

**Table 4.**  
*Direct, Indirect, and Total Effects of the Hypothesized Model*

			Bootstrap (95% CI)			
Hypothesis	Relationship	Point Estimation	Bias Corrected		Percentile	
Indirect effects						
H5	SN → ATT → IN	.051** (significant)	0.009	0.125	0.006	0.117
H10	CE → SN → IN	.105* (not significant)	0.005	0.222	−0.015	0.202
H8	CE → ATT → IN	.165** (significant)	0.064	0.302	0.063	0.3
Direct effects						
H2	SN → IN	.132 (not significant)	−0.002	0.276	−0.016	0.263
H7	CE → IN	.548** (significant)	0.307	0.804	0.306	0.802
Total effects						
H2	SN → IN	.183* (significant)	0.025	0.339	0.018	0.33
H7	CE → IN	.858* (significant)	0.671	1.061	0.659	1.051
Note: ATT = attitude; CE = consumer ethnocentrism; IN = intention; PBC = perceived behavioral control; SN = subjective norm. * <i>p</i> < .05; ** <i>p</i> < .01. Two-tailed test of significance.						

The SN positively and significantly influences attitude, and the attitude has a significant full mediating effect between SN and intention. This is in line with some researchers who found that there is a significant causal path from the SN to attitude, which affects intention (Han et al., 2010; Wang et al., 2021a). However, attitude does not mediate the relationship between CE and intentions toward purchasing domestic EV. It could be the case that CE is a personal internal trait in the context of China as a socialist country and should be considered as a significant precursor of one's evaluation of given behaviors.

Consumer ethnocentrism, attitudes, SN, and PBC together accounted for 44.1% of the variance in intention. Many studies on CE have shown that CE, attitude, SN, and PBC are significant predictors of intention to purchase domestic products (Maksan et al., 2019; Vabø et al., 2017; Xin & Seo, 2019). This study suggested that CE is positioned as a more important driving factor than the other independent variables. This implies that compared to the other predictors, CE is more important for explaining consumer intentions (Vabø et al., 2017). Among TPB model's variables, attitude has the strongest relationship with consumer's intention compared to SN and PBC (Asadi et al., 2021). This result stands in line with some studies showing that the attitude has the most influence on intention in TPB (Wang et al., 2019, 2021b) and that SN and PBC have a weak but significant impact on intention (Xu et al., 2019). The obtained results indicate that the consumer will have higher intention to purchase domestic EV when consumers are approved by other people in that group or by other important people to them and consumers perceive the fewer obstacles (e.g., price, operability, and charging pile).

#### Implication for Academicians

This article uses CE as the core variable to study the impact of CE on domestic EV under the theoretical background of the TPB model. There is some unique research that is different from the past research in this study. First, CE is found to be situation specific, and the effect of CE on the purchasing behavior differs across product categories (Akbarov, 2021; Vabø et al., 2017). Few studies investigated the influence of CE on the purchase intention of domestic EV, and most of the previous studies adopted TPB and focused more on self-interested factors and were dependent on the perception of instrumental or functional attributes. Specifically, most of previous studies regard the adoption of EV purchasing behavior as a rational process and a self-interested choice. This study added CE as irrational or impulsive factors into TPB, and the results showed that CE positively and significantly influenced one's attitude, SN, PBC, and intention toward purchasing EV.

In the original framework of the TPB model, researchers assumed that attitudes, SN, and PBC all have an impact on consumers' purchase intentions, and as predictors, they are independent of each other (Ajzen, 1991). However, researchers may ignore the possibility of mediation role under the TPB in the marketing literature (Bashir et al., 2019; Wang et al., 2021a). The results of this study show that there is an obvious path

connection between SN and attitude, which was then translated into intention; this did not correspond with results of the previous studies. This finding provides the basis for future research in replicating the quantitative data analyses and understanding the influence of attitude, SN, and PBC on consumers' EV selection.

In addition, CE as a cognitive and emotional motivation strengthens one's attitude and intention to purchase domestic products or services. However, rare studies have investigated the indirect effect of CE on intention. The results of this study show that consumers with high CE can influence one's SN and finally affect their intention to purchase EV. Individuals' social norms can be influenced by their significant others' (e.g., close-friends, relatives, and coworkers) higher or lower ethnocentrism and then be translated into their higher or lower intention to purchase EV. The study offers an alternative explanation to how consumers' SN can be influenced by their significant others' CE.

#### Implication for Practice

Being markedly different from results of previous studies, the unique outcomes of this study can be used by the marketers of domestic EV to target consumers and to design marketing campaigns. This study highlights that CE has a significant and strong impact on the purchase intention of domestic EV. Therefore, when domestic EV face competition from foreign companies, marketers should effectively improve their market competitiveness by highlighting the ethnocentric characteristics of domestic EV in their product promotion and inspire people to support domestic products. The study found that consumer attitude, SN, and PBC positively affect the intention and that attitude plays an important mediating effect. Then, it can be concluded people's attitudes toward domestic EV have greatly affected their intention to buy EV. If consumers have a positive attitude, they will be more willing to overcome obstacles to choose domestic EVs and actively regulate the effects of people around you on consumers. Marketers should consider how to change the consumers' attitude that their domestic EV are not as good as foreign ones, especially on the basis of the rapid advancement of China's EV technology. Due to the effect of SN, the marketers should build a good reputation among consumers and organize a series of activities to increase the public influence through customers.

#### Study Limitations

This study has several limitations with regard to data collection. Although the Shanghai Auto Expo with a large population mobility was selected to test the CE variable, the levels of CE of people are different because they come from different regions, such as first-tier and second-tier cities or coastal and inland cities. Generalizing the results of this study should be done with caution. Thus, it is recommended to expand the sample in China or select a specific geographic area. Another limitation of this study is that only the purchase intention of domestic EVs instead of the actual purchase behavior was measured. Although past TPB studies have demonstrated that intention is positively correlated with final behavior, the actual behavior is



not always equivalent to behavioral intention. Finally, research on the factors affecting the purchase intention of EV is relatively new. Future studies may find out how CE interacts with other factors to get an in-depth understanding of the relationship between CE and purchase of domestic EV.

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