

An Extended Model of the Theory of Planned Behaviour to Predict Purchase Intention for Local Brand Vehicles Produced in Malaysia

Anyanwu Hilary Chinedu¹, Sharifah Azizah Haron¹, Ahmad Hariza Hashim¹, Jo Ann Ho²

¹Department of Resource Management and Consumer Studies, Faculty of Human Ecology, Universiti Putra Malaysia, Serdang Selangor, Malaysia, ²School of Business and Economics, Universiti Putra Malaysia, Serdang Selangor, Malaysia

Corresponding Authors' Email: chineduhilary@yahoo.com, sh.azizah@upm.edu.my

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Abstract

The single-digit growth rate of the Malaysian Automotive sector has experienced a slight decline elicited by Covid-19 and a change in consumers' product evaluation criteria. This necessitates an inclusive business model that encompasses consumers' interests and organisational goals through the extension of the Theory of Planned Behaviour with consumer corporate identification (CCI). Using a sample of 373 potential consumers of Proton vehicles in Malaysia, a quantitative study that utilised AMOS graphics version 24 was conducted to predict purchase intention for Proton vehicles produced in Malaysia. The results showed that collectivism and consumer ethnocentrism (CE) explained 44.3% variance in attitude towards purchase intention, whereas the entire model (attitude, collectivism, CE, subjective norm, perceived behavioural control (PBC), and CCI) explained 61.3% variance in purchase intention for Proton vehicles. CE significantly influenced attitudes toward purchase intention more than collectivism. Subjective norm significantly predicted purchase intention for Proton vehicles more than CCI, attitude, and PBC. In a collectivistic society, purchase intention for local products may not be realised without substantial attention to consumers' subjective norms, and CE. Local brand manufacturers should pay attention to previous purchasers' evaluations of local brands to ensure a positive word-of-mouth strategy because they may incidentally be among potential consumers' social circles. Marketers of local brand vehicles should embark on programs that enhance CE to sustain favourable attitudes toward purchase intention for their products. The study demonstrated the importance of a common identity between consumers and firms through CCI implementation and its implications for purchase intention.

Keywords: Consumer Corporate Identification, Local brand, Malaysia, Proton Vehicles, Purchase Intention, Theory of Planned Behaviour.

Introduction

Automobile industries facilitate economic development in developed and developing countries (Scotiabank, 2017; Schrank, 2016), and its advancement has brought significant changes to consumers' lives (Chang et al., 2017). Given the importance of vehicle manufacturing to economic development, Malaysia's automotive industry started as a distinctive project compared to automotive start-ups in other emerging economies (Anazawa, 2021). For example, Malaysian industrial policies, the National Automotive Policies (NAP), and trade liberalisation in the Association of Southeast Asian Nations (ASEAN) which began in 1992 were geared towards strengthening the domestic automotive industry. Hence, Malaysia worked assiduously to improve its automotive industry and is currently Southeast Asia's 3rd highest vehicle manufacturer (Statista.com).

Reports show that vehicle production/marketing contributed 4.2% to Malaysia's GDP in 2018 (Paultan.org), and 4.3% in 2019 (Malaysia Investment Development Authority, 2020). Due to the huge resources that purchased vehicles gulp from consumers, the automotive industry's contributions to the national GDP would be greater if the purchased vehicles were produced locally (Chinedu et al., 2020). However, the single-digit growth rate of the Malaysian Automotive sector has experienced a slight decline occasioned by Covid-19 (Statista.com). Therefore, Malaysia as a nation and local brand vehicle producers ought to understand the predictors of purchase intention for local brand vehicles produced locally.

Purchase intention is one of the most common methods undertaken by marketers in gaining an understanding of consumers' actual purchases (Blackwell et al., 2006). Studies (Du et al., 2018; Al-Amin et al., 2016) have shown that attitude toward purchase intention, subjective norm, and perceived behavioural control (PBC) affect vehicle (both conventional and alternative fuel/new energy vehicles) purchase intention. In addition, consumer corporate identification (CCI) influences purchase intention (Verlouw, 2015; Wu & Tsai, 2008). Specifically, CCI based on corporate social responsibility (CSR) impacts purchase intention (Curras-Perez et al., 2009; Curras-Perez, 2009). The above assertions highlight the dependency of purchase decisions on the above constructs; however, the inability of extant literature/theory to underscore the values or constructs that enhance purchase intention in connection with consumers' quest to gain specific benefits in purchase decisions has made purchase intention a recurrent topic in consumer or marketing research.

In the wake of the above empirical evidence, attitude is the most dominant predicting factor of automobile purchase intention among other psychological constructs (cf. Hamilton & Terblanche-Smit, 2018; Al-Amin et al., 2016; Wang et al., 2013). Moreover, we reason that where a study bothers on purchase intention for local products by citizens or residents of the same country, beliefs are the center point of consumers' decision-making. This necessitates a more in-depth investigation into the antecedents of attitude toward purchase intention for local brand vehicles made in Malaysia.

Consumer ethnocentrism (CE) influences attitudes toward purchase intention for local products (Karoui & Khemakhem, 2019), and collectivism impacts preference for local products (Schrank & Running, 2016).

Nonetheless, while reviewing relevant literature, four issues worthy of consideration were identified: consumers adopt mechanisms that reflect their values or lifestyles to gain specific benefits (Lee et al., 2020) which is geared towards enhancing their purchase decisions; no response to Huang and Qian (2018); Wang et al (2013) call to integrate cultural value (collectivism) in vehicle adoption/purchase intention; lack of studies that explained purchase intention for local brand vehicles produced in Malaysia; researchers' inability to explore Bhattacharya and Sen (2003) proposition on CCI and its ensuing implications on purchase

intention in automobile setting via theory extension. Sadly, consumers are disappointed with the quality of Proton automobiles as the power windows sometimes jam shut, requiring drivers to open their doors and lean out onto the road to hand over cash at toll booths (Autoworld.com.my). In addition, consumers' product evaluation criteria have changed from what they used to be in the past decade (Medley, 2019). This comes on the heels of consumers' adoption of the mechanisms that reflect their values or lifestyles to gain specific benefits (Lee et al., 2020). Furthermore, with the growing concerns about purchase intention for local brand vehicles manufactured locally and their contributions to national GDP (cf. Chinedu et al., 2020), it is crucial to inculcate favourable attitudes into consumers through an organisational display of goodwill or society-friendly engagements in form of CCI which the effect on purchase intention for local brand vehicles manufactured locally has not been studied before. This is anticipated to be covered by the present study because CCI could reinforce consumers' waning purchase intention levels.

Theoretical Background

The main constructs of this study are selected based on the Theory of Planned Behaviour (TPB). TPB's central thesis is that attitude toward behaviour, subjective norm, and PBC predicts behavioural intention, while behavioural intention determines behaviour (Haustein & Jensen, 2018). PBC equally has the capability to influence behaviour directly (Ajzen, 1991).

Studies Hamilton & Terblanche-Smit (2018); Al-Amin et al (2016); Afroz et al (2015) have utilised the original TPB to underpin vehicle adoption/purchase intention. However, it is notable that some other studies Haustein & Jensen (2018); Mohamed et al (2016); Wang et al (2014) have confirmed the robustness of the extended TPB model. Wang et al (2014) established that the extended version of TPB explains greater variance in vehicle adoption/purchase intention. In addition, the original TPB does not encompass ethical or social issues within its model measures (Ozcaglar-Toulouse et al., 2006).

In our quest to modify TPB for stout reinforcement of purchase intention for local products, we prioritise Eagly and Chaiken's (1993) argument that measures of ethical/moral obligation ought to be added to TPB. Adding such a measure represents an individual's internalised moral rules, which reflect their personal beliefs about right and wrong (Ozcaglar-Toulouse et al., 2006). Hence, we contend that moral obligation ought to be a two-way factor, especially in a marketing context. It should be interwoven between consumers and companies, whereby a perceived mutual obligation is prioritised and displayed by every stakeholder in the consumer-company association. Thus, the study incorporated moral obligations from a social identity perspective that addresses the concerns of consumers and companies simultaneously.

From a social identity perspective, it has been noted that persons who identify with certain roles or social categories tend to perform behaviours that conform to those roles or categories (Fishbein & Ajzen, 2010). While self-identity determines certain types of behavioural intentions (Conner & Armitage, 1998), individual or organisational commitment to exhibit moral obligations depends on their identity or belief which tends to practically increase the variance explained in behavioural/purchase intention. Undoubtedly, this is achieved through CCI implementation because consumers are expected to adjust their behavioural intentions when certain behaviours relate to issues that are central to their identities (Ozcaglar-Toulouse et al., 2006). A company's identity (e.g., ethical behaviours)

defines them and what they stand for even in a competitive atmosphere. Such a common belief based on the identity between consumers and a company is consumer-corporate identification (CCI). Therefore, the study extends TPB with CCI because it covers both consumers' and the company's moral norms.

Literature Review

Purchase intention is a consumer's willingness to buy a given product at a specific time or in a particular situation (Lu et al., 2014), and the tendency that a consumer will purchase a product (Dodd & Supa, 2011). Intention is a major determinant of behaviour (Ajzen, 1991), which can be used by marketers as the closest substitute for consumers' actual buying behaviour (Assael, 2004). Studies have shown that vehicle purchase intention is a proximal antecedent of vehicle purchase behaviour (cf. Al-Amin et al., 2016; Wang et al., 2014; Afroz et al., 2015). Hence, understanding consumers' vehicle purchase behaviour could rely on their purchase intention. To clarify the connections between purchase intention for local brand vehicles produced locally and its factors, this section is further divided into sub-sections.

Purchase Intention and Attitude

Attitude is the level to which the performance of a behaviour is valued positively or negatively (Haustein & Jensen, 2018). In a vehicle purchase setting, attitude is a consumer's favourable or unfavourable evaluation of vehicle adoption behaviour (Wang et al., 2014); and the function of individual and ecological concerns (Afroz et al., 2015). Several links between attitude and vehicle purchase intention have been established in the literature. For instance, in a Chinese study that investigated consumers' intention to adopt hybrid electric vehicles, Wang et al (2014) found that attitude influenced the intention to adopt hybrid vehicles. Similarly, a two-stage study that identified and characterised potential electric vehicle adopters in Canada conducted by Mohamed et al (2016) revealed that vehicle adoption intention is primarily influenced by attitude towards vehicle adoption intention.

Several other studies (Hamilton & Terblanche-Smit, 2018; Afroz et al., 2015) have confirmed the significant influence of attitude on vehicle purchase intention. This implies that vehicle purchase intention is inextricably linked to consumers' attitudes. On one hand, it depicts how individual concerns shape consumers' attitudes toward vehicles. On the other hand, it shows the favourability and vice versa of a certain attitude based on ecological concerns. While attitude is seen to be related to individual and ecological concerns (Afroz et al., 2015), it underscores the way consumers' concerns for different products or situations vary along with personal status, beliefs, and impulses. Consumers that ponder over ecological concerns are likely to tailor their vehicle purchases based on consumption needs, rather than overt display, whereas those that demonstrate individual concerns more than environmental concerns tend to exhibit different attitudes to either maintain their status or conceal their consumption inadequacies. Given that attitude is relevant to hybrid or environmentally friendly vehicles' purchase intention (Haustein & Jensen, 2018; Mohamed et al., 2016; Afroz et al., 2015; Wang et al., 2014), it is also believed to influence local brand vehicles' purchase intention. Against this backdrop, it is hypothesised that

H₁. Attitude towards purchase intention significantly predicts purchase intention for local brand vehicles produced locally.

In line with attitude's dominance in predicting automobile purchase intention among other psychological variables (Hamilton & Terblanche-Smit, 2018; Al-Amin et al., 2016), and to

highlight the importance of beliefs (a component of attitude) in issues that concern protection and upholding consumers' heritage, the study delves into the antecedents of consumers' attitude in respect to local brand vehicles produced locally.

CE is a consumer's willful dissociation in exhibiting favourable attitudes toward the procurement of goods and services from foreign firms while maintaining their liking for domestic brands manufactured locally (Chinedu et al., 2022). A consumer with a high degree of ethnocentrism has a more favourable attitude toward local products than a person committed to his/her place of life (Yildiz et al., 2018). Despite highlighting the role of CE on attitudes toward local products, Yildiz et al findings underscore the bossy influence of CE over the place of life; implying that CE is pivotal in developing attitudes toward purchase intention for local products. Collectivism impacts attitude towards green products purchase intention (Sreen et al., 2018), and preference for local products (Schrank & Running, 2016). Based on this, the study maintains that CE and collectivism would influence attitudes toward local products in other product categories such as vehicles because, the influence of CE and collectivism on attitudes toward high-involvement products is a psychological process (Chinedu et al., 2020). Thus, it is hypothesised that

H_{1a}. Consumer ethnocentrism significantly influences attitudes toward purchase intention for local brand vehicles produced locally.

H_{1b}. Collectivism significantly influences attitudes toward purchase intention for local brand vehicles produced locally.

Purchase Intention and Subjective Norms

Subjective norm is a person's perception of what should or should not be done following the compensation or penalty that may ensue performance of a certain behaviour (Pena-Garcia et al., 2020). It is the expectation of relevant others to choose/purchase a fuel-efficient and environmentally friendly car (Nayum et al., 2016); a construct that is commonly used as an antecedent in decision-making (Sandve & Ogaard, 2014) because people are more likely to engage in certain actions if their role models think they should do so (Schepers & Wetzels, 2007). While studies (Mohamed et al., 2016; Afroz et al., 2015) found a significant influence of subjective norms on purchase/adoption intention for environmentally friendly vehicles, Peters and Dutschke (2014) noted that subjective norms only had a significant influence on individuals with little or no interest in battery electric vehicles' purchase, whereas it did not influence battery electric vehicle potential users' intention. This shows the subjectivity inherent in the perceptions of consumers according to their bonds and loyalty to role models.

Predicated on the above, consumers' subjective norms influence on vehicle purchase intention seems to be activated along with a vehicle's level of negative effects on consumers' environments, with their relevant others' adoption of environmentally friendly vehicles and vice versa. The present study asserts that, if subjective norms could influence purchase intention for environmentally friendly vehicles as noted by Afroz et al (2015), purchase intention for local brand vehicles produced locally would as well be influenced by subjective norms; hence, notable brand endorsers/ambassadors propagating the image of local brand vehicles made locally will anticipate their fans to purchase local brand vehicles. Given that, it is hypothesised that

H₂. Subjective norms significantly predict purchase intention for local brand vehicles produced locally.

Purchase Intention and Perceived Behavioural Control (PBC)

The theory of planned behaviour added Perceived behavioural control (PBC) as its latest component and established it as the determinant between intentions and actual behaviour (Ajzen, 2002). As a result, a consumer who has no control over a purchase situation/intention may not likely participate in the purchase action. This study defines PBC as the extent to which consumers perceive a behaviour or behavioural intention to be under their control. PBC exerts influence on the purchase intention of new energy vehicles in China (Du et al., 2018), and hydrogen vehicles in Malaysia (Al-Amin et al., 2016). In a study that identified and characterised potential electric vehicle adopters in Canada, Mohamed et al (2016) found that PBC was the dominant predictor of electric vehicle adoption, while Hamilton and Terblanche-Smit (2018) evidenced that PBC is the least predictor of green vehicles' purchase intention in South African automobile market. Even though the sequence of PBC's predictive influence on purchase intention is in contention in the literature, this study posits that the two factors of PBC (beliefs about controllability and self-efficacy) as inferred by Ajzen (2002) could determine a consumer's PBC over automobiles. Hence, where a consumer's belief about controllability and self-efficacy wanes, PBC will likely exert little or no influence on purchase intention and vice versa.

Consequently, PBC is a key factor to be investigated in this study to understand the shaping of consumers' purchase intention in the context of local brand vehicles produced locally. Based on the above literature, it is hypothesised that:

H₃. Perceived behavioural control significantly predicts purchase intention for local brand vehicles produced locally.

Purchase Intention and Consumer Corporate Identification (CCI)

Consumer corporate identification (CCI) is a cognitive state of self-classification existing between companies and consumers Bhattacharya & Sen (2003), which encompasses feelings of solidarity and support for the company, sharing of characteristics with the company, and sharing of characteristics with other consumers of the company (Hildebrand et al., 2010). Identification occurs when people perceive atoms of attributes in an organisation that match their defining characteristics (e.g., personality traits, values, demographics) with those that define the category (Dutton et al., 1994). According to Ran and Zhou (2019), consumers often come into the possession of a sense of identity in the process of relating with companies. This study argues that consumers' sense of identity with a company could only be activated upon the realisation of a common value or principle between consumers and the company. To establish CCI, consumers evaluate perceived company identity and identity attractiveness as basic conditions (Bhattacharya & Sen, 2003).

Consumers identify with a company because its attributes are meaningful, attractive, and similar to their characteristics or to characteristics that they desire to have. The attractiveness and meaningfulness of a company's identity have the potency to increase consumers' affection and trust in a company and/or its products. In this period of clamor for a sustainable environment and organisational response to social challenges, meaningful attributes and attractiveness of companies demonstrate their moral obligations towards consumers and society at large. Moreover, going by the principle of optimal distinctiveness, consumers attempt to resolve the critical pressure between their needs to be like others and their needs to be unique by identifying with groups that satisfy both needs (Brewer, 1991). However, consumers' needs can only be satisfied if common values are shared between them and organisations. All these are encapsulated in CCI based on corporate social responsibility (CSR).

Therefore, CCI from a CSR lens serves as an interlaced moral obligation between consumers and companies.

CCI significantly influences consumer purchase intention (Chen et al., 2015; Wu & Tsai, 2008). CCI based on CSR generates attitudinal and behavioural responses (Curras-Perez et al., 2009), and affects purchase intention (Curras-Perez, 2009). In a Taiwanese study that investigated car purchase intention among working professionals, Lin et al (2011) evidenced that trust and affective identification are positively related to car purchase intention. This underscores the need for companies to engage in CCI that fosters trust and affects consumers' needs. Trust and affective identification could be achieved through the implementation of consumer-centered CSR activities, which are believed to increase purchase intention. In an automobile setting, a robust CCI could augment consumers' efforts in meeting the requirements for cash or credit sales with some marketing incentives that target more purchases from consumers. For example, CCI that addresses bad roads within a locality is effective and will cultivate trust among consumers because it absolves consumers from the skepticism of vehicle damages due to bad roads. In view of the above, it is hypothesised that

H₄. Consumer corporate identification significantly predicts purchase intention for local brand vehicles produced locally.

Sequel to the above literature, the study represents the hypotheses and conceptual linkages between the constructs in Figure 1 (conceptual framework). We also suggest that the conceptual framework would substantially address emerging issues related to purchase intention for local brand vehicles produced locally.

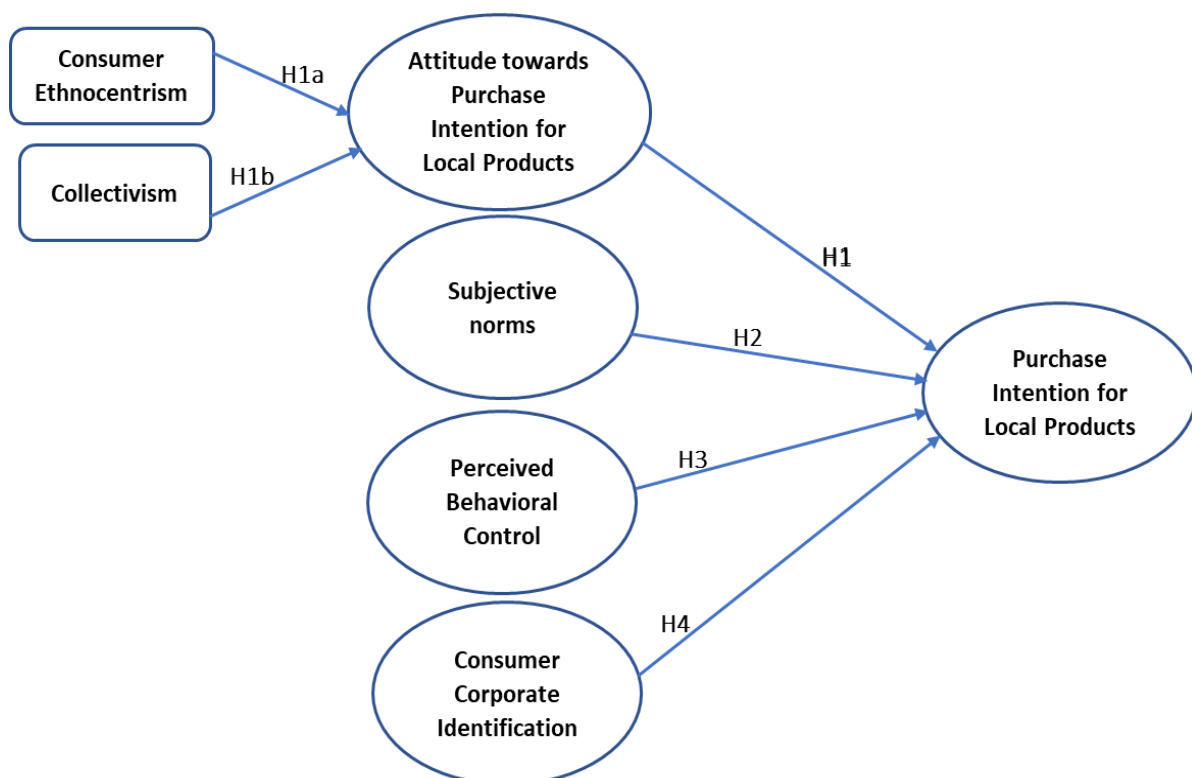


Figure 1: Conceptual framework

Methodology

A quantitative research approach was adopted with a cross-sectional design. Cross-sectional design involves the collection of data at a particular time and is often used to address hypotheses or questions related to research problems.

Sample and Data Collection

About 385 potential consumers of Proton vehicle manufacturing company were targeted based on Cochran's (1977) sample size calculation formula. Consumers of Proton vehicle manufacturing company were adopted as the study subjects due to Proton's market penetration in Malaysia's automotive industry. Moreover, despite not being completely a national vehicle company now, Proton is the first local vehicle manufacturing firm in Malaysia (paultan.org), with over 3,760,000 consumers locally (Shah, 2016; Commons.wikimedia.org/). This gives Proton an edge over Perodua (Malaysia's current national automobile manufacturer); thus, Proton is apt to be used as a local brand vehicle manufactured locally. For the sampling, a systematic sampling technique was utilised. Data were collected from every fourth person at the designated data collection posts, where a potential respondent refused to participate, the interval sequence was repeated to get another respondent. Data were collected from potential consumers of Proton through a mall intercept survey with the use of questionnaires at three locations (Sunway Pyramid, Pavilion shopping mall, and Mid Valley Megamall) in Klang Valley, Malaysia between 1st week of December 2019 and 1st week of March 2020. These malls were selected among the seven biggest malls in Klang Valley, Malaysia, and were considered appropriate for collecting data due to the high frequency of customer movement. Previous consumer researchers (see: Jin-Lee et al., 2013) have validated mall intercept as a robust and reliable means of data collection. However, about 97% (373) valid responses were received from potential consumers of Proton vehicles for onward analyses.

Ethical Considerations

This study followed all ethical standards for research that has direct contact with Human Subjects. Before data collection, ethical approval was obtained from Universiti Putra Malaysia's Ethics Committee on Research involving Human Subjects with this approval number: UPM/TNCPI/RMC/1.4.18.2 (JKEUPM). More so, consent forms were given to the respondents through which the purpose and methodology of the study, and the right to withdraw from participating at any time were communicated to them.

Measures

Measurement scales for the seven multi-item constructs were adapted from previously validated instruments in the literature. Each construct was measured on a seven-point Likert scale ranging from 1= strongly disagree to 7= strongly agree. A seven-point Likert scale enables a high variance volume in a dataset (Chinedu, Sharifah, Hashim, & Ho, 2021). Apart from purchase intention, which was measured with five items, other constructs were measured with four items respectively. Measures for purchase intention for local brand vehicles manufactured locally were adapted from Dodds et al (1991), while the measures for CCI were adapted from (Hildebrand et al., 2010). The measures for attitude towards purchase intention were adapted from Taylor and Todd (1995); Kim and Han (2010), whereas subjective norm was measured with items adapted from (Taylor and Todd, 1995; Ajzen, 2013). PBC was measured with items adapted from Taylor and Todd (1995); Ajzen (2013); Consumer

ethnocentrism was measured with items adapted from Shimp and Sharma (1987), and Collectivism scales were adapted from (Yoo et al., 2011).

Model Validation

A pooled confirmatory factor analysis (CFA) was conducted with 373 potential consumers of Proton vehicles in Klang Valley, Malaysia using AMOS version 24 to validate the model. In order to achieve a good fitness index, the root mean square of error approximation (RMSEA) must be $<.08$ (Byrne, 2001); Relative Chi-square <5.0 (Bentler, 1990; Marsh & Hocevar, 1985); comparative fit index (CFI) $>.90$ (Bentler, 1990); normed fit index (NFI) $>.90$ (Bentler & Bonett, 1980); and Tucker-Lewis index (TLI) $>.90$ (Bentler & Bonett, 1980). The model exhibited satisfactory fit indices: Relative Chi-Sq = 1.858; CFI=.955; TLI= .949; RMSEA= .048.

The internal consistency of the measures was assessed with composite reliability. A reliability value of .70 is sufficient for research purposes (Hair et al., 2010). All the study constructs' reliability ranged between .83 and .91; thus, all the measures were reliable. Also, convergent validity is achieved when all the standardised factor loadings of an instrument are $\geq.50$ (Hair et al., 2010), and with average variance extracted (AVE) $>.50$ (Fornell & Larcker, 1981). Results revealed that both the standardised factor loadings for all the study constructs and their AVE values were $>.50$. Therefore, the convergent validity of the measures was achieved.

Discriminant validity was examined by comparing inter-construct squared correlation with individual construct AVE (Fornell & Larcker, 1981). Table 1 shows that all the study constructs' AVE is greater than their inter-construct squared correlation; therefore, the measures satisfactorily exhibited discriminant validity.

Table 1

Reliability, Average Variance Extracted (on the diagonal), and Correlation Coefficients (on the off-diagonal) of the Study Instruments

	CR	PI	CCI	ATT	SN	PBC	COLL	CE
PI	0.912	0.676						
CCI	0.891	0.373	0.672					
ATT	0.903	0.441	0.298	0.700				
SN	0.831	0.504	0.324	0.477	0.556			
PBC	0.843	0.371	0.138	0.305	0.366	0.574		
COLL	0.843	0.259	0.163	0.238	0.370	0.293	0.575	
CE	0.871	0.286	0.289	0.349	0.397	0.228	0.259	0.629

Note: CR= Composite reliability; PI= Purchase intention; CCI= Consumer corporate identification; ATT= Attitude; SN= Subjective norm; PBC= Perceived behavioural control; COLL= Collectivism; CE= Consumer ethnocentrism

Sample Characteristics

Descriptive statistics indicated that 51.5% of the respondents are females. In terms of age, respondents were categorised into four age groups (18 to 28; 29 to 39; 40 to 50; and 51 to 60 years). The first age group accounted for 56.3% of the total respondents. This was followed by the second group 27.6%, while the last group constituted the least (3.5%) of the respondents. The respondents' estimated monthly income was measured with Malaysia's local currency, Ringgit Malaysia (RM). Every income class was believed to be crucial in the study and was accommodated in the study by using Malaysia's minimum wage as the lower-class boundary of the respondents' estimated monthly income, whereas the midpoint salary of mid-senior public servants and above was used as the upper-class boundary of the

respondents' estimated monthly income. The minimum wage is pegged at RM1200 in Malaysia (The Star, 2020), while the average person in Malaysia earns RM6,590 per month including housing, transportation, and other benefits (Salaryexplorer.com). The respondents' estimated monthly income was classified into four: less than minimum wage; minimum wage to RM3,487; RM3,488 to RM5,667; and greater than RM5,667. The second income group accounted for the highest number of respondents (41.4%), whereas the fourth income group comprised the least number of respondents (12.3%). As shown in Figure 2, given the respondents' mean age of 30.94 years, and mean income of RM2,700, it shows that the majority of the respondents are in the early adulthood stage and can purchase items of their choice. However, the income mean is an indication that the respondents earn a meager income monthly compared to potential consumers in developed countries.

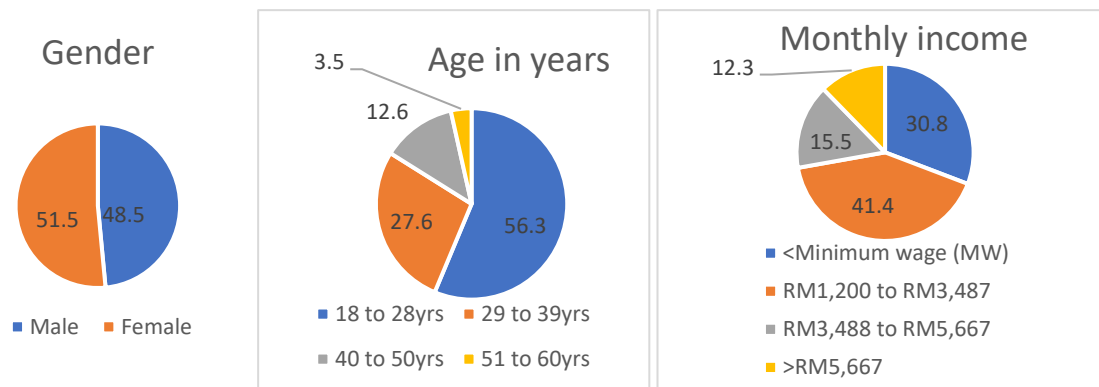


Figure 2: Charts of respondents' characteristics

Results

Structural equation modeling (SEM) was performed to determine the influences of collectivism and consumer ethnocentrism (CE) on consumers' attitudes towards purchase intention, and the predictive effects of attitude towards purchase intention, subjective norm, PBC, and CCI on purchase intention for Proton vehicles produced in Malaysia. While CE and collectivism explained 44.3% variance in attitude towards purchase intention, the entire constructs in the model (CE, collectivism, attitude, subjective norm, PBC, and CCI) as depicted in Figure 3 explained 61.3% variance in purchase intention for Proton vehicles produced in Malaysia. This shows the theoretical compatibility and relevance of the constructs in the model.

Chi-square (df) = 730.989 (361); P value = .000
 ;Relative Chi-Sq = 2.025; AGFI = .856
 ;GFI = .880; CFI = .946; IFI = .946; TLI (>=0.9) = .939
 ;RMSEA = .052
 (Standardized estimates)

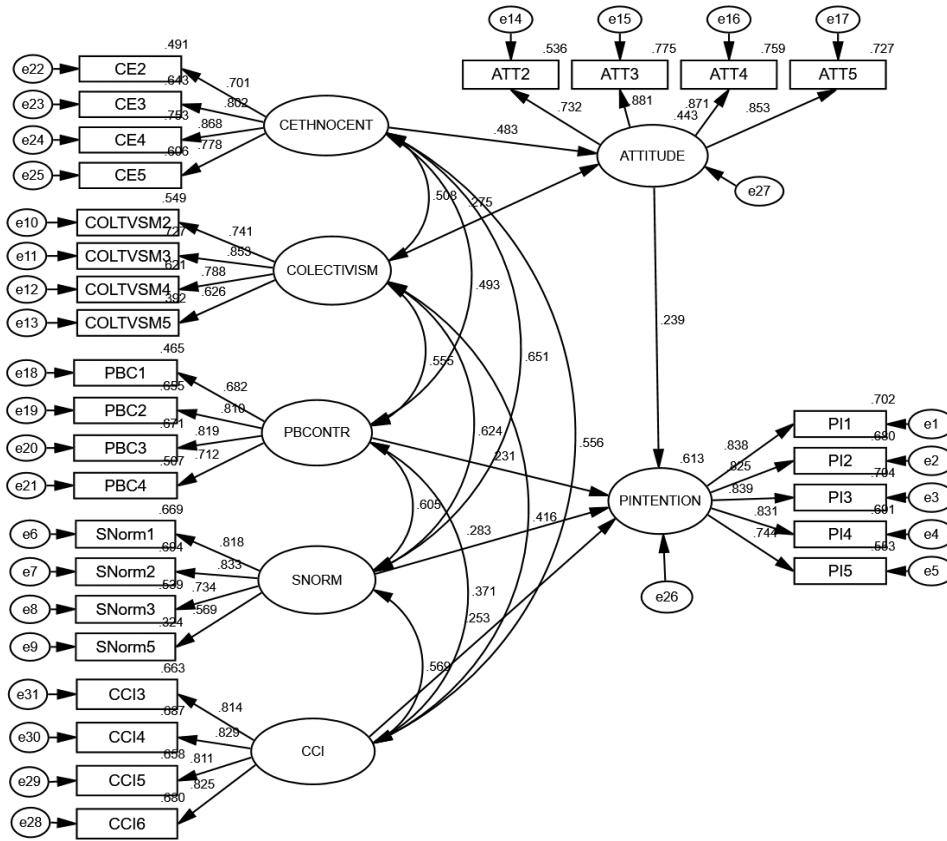


Figure 3: Structural model

Accordingly, consumer ethnocentrism (CE), and collectivism were entered into the research model as antecedents of attitude towards purchase intention for local brand vehicles produced in Malaysia, whereas attitude towards purchase intention, subjective norm, perceived behavioural control (PBC), and consumer corporate identification (CCI) were added into the same model as direct predictors of purchase intention for local brand vehicles produced in Malaysia. Attitude towards purchase intention ($\beta = .24, p < .001$) significantly and positively predicted purchase intention for local brand vehicles produced in Malaysia. Based on this result, H_1 is supported: attitude towards purchase intention significantly predicts purchase intention for local brand vehicles produced locally. This implies that potential consumers' attitudes are significant determinants of purchase intention for local brand vehicles made in Malaysia. In addition, it demonstrates that the more favourable consumers' attitudes toward purchase intention are, the higher the purchase intention for local brand vehicles manufactured in Malaysia.

Following the hypothesised two antecedents of attitude, CE ($\beta = .48, p < .001$) and collectivism ($\beta = .28, p < .001$) significantly and positively influenced attitudes toward purchase intention for local brand vehicles made in Malaysia. Hence, H_{1a} and H_{1b} are supported: CE and collectivism significantly influence attitudes toward purchase intention for local brand

vehicles produced locally respectively. This is an indication that CE and collectivism ominously influence attitudes toward purchase intention for local brand vehicles made in Malaysia, with higher CE and collectivism tendencies leading to more favourable attitudes.

Furthermore, subjective norm ($\beta = .28, p < .001$) and CCI ($\beta = .25, p < .001$) significantly and positively predicted purchase intention for local brand vehicles produced in Malaysia more than PBC ($\beta = .23, p < .001$). Sequel to these results, H₂, H₃, and H₄ are supported. Subjective norm, PBC, and CCI significantly predict purchase intention for local brand vehicles produced in Malaysia respectively. This implies that subjective norm, CCI, and PBC expressively predict purchase intention for local brand vehicles manufactured locally. It further depicts that higher scores in the constructs are instrumental in achieving high purchase intention for local brand vehicles made in Malaysia. Table 2 summarises the results of the hypothesised paths in the model (H₁ to H₄).

Table 2
Summarised Results of the Structural Paths

Paths	Hypotheses	β standardised	Cr	<i>p</i> value	Results
Attitude → PI	H ₁	.239	4.882	.001	Supported
CE → Attitude	H _{1a}	.483	7.346	.001	Supported
COLL → Attitude	H _{1b}	.275	4.628	.001	Supported
SN → PI	H ₂	.283	4.189	.001	Supported
PBC → PI	H ₃	.231	4.034	.001	Supported
CCI → PI	H ₄	.253	4.808	.001	Supported

Note: PI=Purchase intention; CE= Consumer ethnocentrism; COLL= Collectivism; SN= Subjective norm; PBC= Perceived behavioural control; CCI= Consumer corporate identification; Cr= Critical ratio

Discussion

The robustness of the extended model of TPB in underpinning vehicle purchase intention/adoption intention has been highlighted in the literature (Mohamed et al., 2016; Wang et al., 2014). Yet, its applicability has come short of being tested on local brand vehicles manufactured in developing countries, and the antecedents of the major determinant (attitude) of purchase intention. This prompted a response to calls for the integration of cultural values (collectivism) and ascertaining consumer ethnocentrism (CE) ability to influence attitudes toward purchase intention for local brand vehicles in developing countries and thereafter purchase intention. This simultaneous examination of various variables has resulted in some meaningful contributions by providing valuable marketing insights and arousing further interest in consumer behaviour research, especially in developing countries and the automobile sector. While our results are in tandem with Afroz et al (2015); Wang et al (2013) findings on the significant predictive effects of attitude, subjective norm, and PBC on purchase intention, it is remarkable that CCI's significant predictive effect on purchase intention for local brand vehicles produced locally encapsulates Du et al (2018); Mohamed et al (2016) findings on the significant predictive effects of moral norms on new energy vehicles, and electric vehicles adoption respectively. The significant predictive effect of CCI on purchase intention for local brand vehicles produced in Malaysia strengthens the viability of moral norm or ethical obligation as a two-way factor in a marketing context; whereby a perceived mutual commitment is activated and willingly enforced by consumers and the company to the benefit of both parties. In addition, the significant influences of CE and collectivism on

attitude towards purchase intention for local brand vehicles made in Malaysia are in line with Yildiz et al (2018); Schrank and Running (2016) respectively.

Our study's results usher in several implications: first, the significant predictive effects of attitude and CCI on purchase intention underscores the importance of inculcating favourable attitudes into consumers through the demonstration of goodwill or society-friendly engagements by business organisations. Attitude is a learned disposition (Ajzen, 1991), implying that consumers' attitudes are not natural: they are either based on information acquired, direct experience with a product, or traits seen in others. In the course of CCI implementation by business organisations, no doubt, consumers are observant of organisational engagements that foster consumer well-being. Consumers' observations in this regard can instigate favourable chinwag among themselves, which in turn precipitates favourable attitudes.

Consumers' attitudes may be triggered by utility derived from a product (Ruiz-Molina & Gil-Saura, 2008). Hence, manufacturers should endeavour to include product attributes that have the potency to inculcate favourable attitudes in consumers. In the automobile context, producers of local brands are expected to adopt enticing vehicle features present in high-quality vehicles manufactured in other countries (such as low fuel consumption, pre-safe nudging, rear entertainment systems, power driver's seat with adjustable lumbar support) as a way of creating favourable attitudes towards purchase intention for their products and CCI implementation simultaneously. Particularly, low fuel consumption is a way of displaying a vehicle producer's green images. It is a realistic strategy for implementing their corporate social responsibilities via CCI (Zhao et al., 2017). Therefore, manufacturers' inability to inculcate favourable attitudes in consumers and implement CCI is capable of deterring purchase intention for local brand vehicles. Specifically, marketers of such business organisations are in for a herculean task: they may convince no or very small number of consumers to adopt or purchase their products. Companies in this category are likely to shut down in no distant time.

Second, the significant influence of CE and collectivism on attitude towards purchase intention for local brand vehicles produced in Malaysia resonates with consumers' resolve to champion the superiority of products made in their country irrespective of the standard, and a holistic clamor for group/societal beliefs. Despite some previous studies Agbonifoh & Elimimian (1999); Bahaee & Pisani (2009) that suggested either reverse or minor influence of CE on purchase intention for local products among consumers in developing countries which may have induced doubt to some people on CE's ability to influence attitude towards purchase intention for local products, the current result joins more recent studies Karoui & Khemakhem (2019); Yildiz et al (2018) that established the significant influence of CE on attitude towards purchase intention for local products.

Similarly, collectivism's significant influence on attitudes toward purchase intention for vehicles made in Malaysia calls for a proactive approach toward in-group beliefs. Consumers' attitudes toward local products are embedded in belief structure cf. He & Wang (2015), whereby societal well-being and interests are prioritised. Hence, it is submitted that consumers' attitudes toward purchase intention for local products tend to wane with little or no ethnocentric tendencies, while a lack of an organisational proactive approach in sustaining in-group beliefs can instigate unfavourable attitudes toward local products. Marketers of local

firms are enjoined to engage in programs that enhance CE and collectivism and incorporate them in their marketing mix strategies for a sustained favourable attitude towards purchase intention for local products. However, to compete effectively with local manufacturers, marketers of foreign products should identify parts of the country with low ethnocentric and collectivistic tendencies and cash in through product price reduction.

Third, the significant predictive effects of subjective norm and PBC on purchase intention for local brand vehicles produced in Malaysia highlight the instrumentality of consumers' social circle and purchase capability/incapability. Consumers are willing to purchase vehicles in line with advice from others or those who have vehicles (Lane & Potter, 2007). Consumers are more likely to purchase certain vehicles if their household members, colleagues, or friends own one (Du et al., 2018). Sequel to this, the psychology and interest of the consumers' circle should be considered by vehicle manufacturers in terms of product attributes because the literature suggests that consumers are socially influenced. In the same vein, PBC's significant effect on purchase intention for local brand vehicles made in Malaysia is in tandem with (Du et al., 2018; Afroz et al., 2015). Even though Proton potential consumers have demonstrated sizable importance to purchase capability in their quest to buy Proton vehicles, we argue that the significant effect of PBC on purchase intention for local brand vehicles manufactured in Malaysia has an incidental profile undertone. This could be attributed to existing policies such as a minimum down payment of at least 10% of the total car value, and a typical interest rate of 2.5% per annum (Imoney.my, 2015). Apart from that, dealers or banks might offer special purchase deals with a 0% down payment, whereby a consumer can finance the whole purchase at interest rates ranging from 12% to 22% (Investopedia.com). However, both options require weighty consideration of a potential vehicle buyer's financial and situational standing. Be that as it may, the latter option often results in potential consumers paying more interest because of the higher loan amount, while the first requires good savings before vehicle purchase.

Conclusion

The result of this paper contributes to the literature on predictors of purchase intention for local brand vehicles manufactured in Malaysia and the efficacy of the extended TPB model to ensure sustainability for both consumers and companies simultaneously. In cognizance of Eagly and Chaiken's (1993) argument that measures of ethical/moral obligation should be added to TPB, this study submits that the inclusion of ethical/moral obligations in purchase intention/adoption intention studies should be interwoven: hence, moral obligations of both the firm and consumers must come into play. This specifically highlights the importance of CCI as a construct that encompasses moral obligations from consumers and the firm. High CCI implementation must be intensified by local car manufacturing companies to demonstrate the similarity and embeddedness of identity between the major stakeholders. This could help the firm communicate other relevant information about its products to consumers. Moreover, considering that CCI is the second to the highest predictor of purchase intention in the model, the single-digit growth rate of the Malaysian Automotive sector which experienced a slight decline due to Covid-19 (Statista.com) is bound to witness a positive turnaround with the inclusion of CCI in business models. Therefore, it is concluded that without the addition of CCI in purchase intention studies utilizing the extended TPB model, the inclusion of ethical/moral obligations is skewed.

Marketers of foreign vehicles in Malaysia should be prepared for the hurdles of non-tariff barriers such as CE and collectivism when trying to penetrate Malaysian car markets. To sustain a favourable attitude towards purchase intention for local vehicles produced in Malaysia, marketers of local car companies are advised to embark on programs that enhance consumer ethnocentrism and in-group beliefs, while marketers of foreign vehicles are anticipated to target parts of the country with low ethnocentric consumers through product price reductions. In addition, foreign car companies may seek partnerships with domestic firms to demean the effects of CE on their products.

Moreover, purchase intention for local products in a collectivistic society may not be realised without due consideration of subjective norms (consumers' social pressure) and PBC. This is because, while social pressure plays a vital role in affecting consumers' behaviour (Wang et al., 2014), PBC plays a critical role in consumers' vehicle purchase intentions (Hamilton & Terblanche-Smit, 2018). Therefore, local brand vehicle manufacturers/marketers should pay attention to enhancing previous purchasers' evaluation of local brand vehicles because they may incidentally be among consumers' social circles to ensure a positive word-of-mouth (WOM) strategy to improve consumers' subjective norms. Going by the demography of our sample, the potential purchasers of local brand vehicles in Malaysia are low-income and middle-income consumers, and the prices of local brand vehicles may be seen as an important decision-making factor for them. Policymakers are expected to introduce some incentives and policies (such as minimal road tax for local vehicles, and compulsory adoption of local brand vehicles in every ministry or agency) concerning the purchase and usage of local brand vehicles for low-income or middle-income consumers. Hence, the provision of incentives for local brand products may be an effective way to lower the price.

Limitations of this research mainly concern the collection of data from Malaysia's capital suburb, Klang Valley, which despite accommodating consumers from different parts of the country, may not be ideal for outright generalisation of the findings to the entire Malaysian population. This is because consumers living in other parts of Malaysia (aside from Klang Valley) may be of varied opinions towards the study constructs. Also, the study is limited to certain demographic profiles and must be generalised cautiously, especially the influence of consumer ethnocentrism. For instance, CE has been reported to vary among different demographic and socio-psychological groups (Shankarmahesh, 2006). Therefore, future researchers should collect data from various parts (cities and rural) of the country for a more generalisable result. This is expected to integrate different demographics and socio-psychological groups into the study, and further explain the orientation (horizontal or vertical) of Malaysian ethnocentric tendencies with more reactions concerning CCI implementation in remote parts of the country. Lastly, the mall-intercept approach used in the study's data collection may have affected respondents' responses. Even though mall intercept has been validated as a reliable source of data in consumer research, shoppers' hasty attention to survey questions increases the likelihood of unengaged responses from respondents. Consequently, future researchers should adopt other forms of data collection strategies.

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