

The Role of Consumption Values and Attitude to Determine Consumers' Intention to Purchase Green Cars: A Pilot Study in Northern Malaysia

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In Malaysia, pollution issues have encouraged automotive industries and governments to develop and support the adoption of green cars to reduce environmental devastation. Consumers, however, still show resistance to adopting green cars. Sheth's consumption values theory is used to understand the factors that cause this phenomenon. Five new dimensions were obtained from the theory and field and introduced to consumption values' factors. The results of this paper enable stakeholders to understand the vital elements that may affect consumer behaviour. The pilot study was conducted using a convenience sample with 57 cars' showrooms' administrators and visitors in northern Malaysia. The results of the internal consistency and the exploratory factor analysis (EFA) confirm the reliability of the constructs and the model overall. Finally, the managerial implications for further research are considered.

Key words: *Consumption values, fuel prices, green self-identity, resale price, self-expressive, variety-seeking.*

Introduction

Malaysia is one of the developing countries that suffer from air pollution due to the increasing number of cars on the road (Brohi et al., 2018). Over the last ten years, on the basis of statistics from the Malaysian Automotive Association (MAA), more than 6.6 million passenger cars were added to roads. Approximately 70.4% of carbon emissions are from passenger cars based on the Department of Statistics Malaysia (2018). Not to mention, based on data from the Energy Market Authority (2018), passenger cars attributed almost half of the nation's fuel energy consumption (45.2%), which was comparatively higher with just 5.5% in other countries like Singapore. In this respect, the government of Malaysia has recognised the

challenges of the growing number of passenger cars. Several policy initiatives and programs were introduced and implemented in connection with environmental sustainability and energy challenges. One of the government's current plans was the Green Technology Master Plan (GTMP) (2017-2030), which was designated as a sustainable initiative to change the country's path to growth. The strategy exists to strengthen the use of green cars on the road with much less energy consumption and emissions of carbon. In addition to exempting locally assembled vehicles from incurring sales tax, many public electrical charging points have been installed. The trend in Malaysia for Green Cars has, however, continued in the past 15 years to struggle between 0% and 3%. Only 99,031 hybrid cars were sold in Malaysia between 2004 and 2018 based on the statistics of the Malaysian Automotive Association (2019). At the time, other countries showed a higher green car sales record, with 60% of China, 49% of Norway and 19% of Iceland Bunsen et al. (2018). These phenomena have drawn a number of scholars to examine why the sales green cars are so weak. Therefore, when it comes to these challenges, it is important to investigate consumers' intention toward green cars to see why around 97 per cent of car buyers are not interested in green cars.

Some researchers such as Ensslen et al. (2018); Carlucci (2018); Cecere, Corrocher & Guerzoni (2018) have said the high selling cost of green cars is one of the most important obstacles to its widespread acceptance. Nevertheless, the prices of green cars in both the new and used car markets of Malaysia show otherwise. Another obstacle that was found to be behind the poor sales of green cars is the perceived quality. Han et al. (2017) and Wen and Noor (2015) stated that purchasers might have concerns about the quality of green cars. The low popularity of green cars cannot, however, be attributed to green car quality, as most of the current green car models are replicas of famous cars, which are still widely accepted such as Toyota, Mercedes-Benz, BMW, Honda, Nissan, Hyundai and Volvo. So, the question that arises when sales prices and quality factors have been rectified is why consumers are reluctant to accept green cars. In order to get a credible answer, the consumer perspective should have been heard. Therefore, the authors carried out an open online discussion on Lowyat.net website, which is recognised as Malaysia's largest online community platform. The question arose for discussion was why the demand for green cars is weak at a time they have the lowest price and cost; also, they are a reliable quality as models of well-known cars. Honda City was given as an example, as one of the most popular cars in Malaysia. Most respondents argued that green cars' resale prices and fuel prices make green cars a futile choice. It is worth noting that we found that fuel prices in Malaysia are low compared to other countries when looking at the participants' answers, and there are still government subsidies provided. In addition to hybrid cars, more than 70 percent of their purchase price is lost, and conventional cars have more reselling value and better demand in the 2nd hand market. In order to find the results regarding the impact of fuel prices and selling prices on consumer behaviour towards green cars, this required an extensive search of the literature.

Paswan, Crawford, Ngamsiriudom, and Nguyen (2014) indicated that a change in consumer behaviour towards green cars could involve fuel prices. Fuel prices have been classified by

Coffman, Bernstein and Wee (2017) as an external factor affecting green car adoption. Likewise, Lim, Perumal, and Ahmad (2019) assumed that if the price of fuel increased, the majority of Malaysians would consider buying green cars. Helveston et al. (2015), however, argued that some customers put less emphasis on fuel expenses. This paper, therefore, includes fuel prices as a new dimensional conditional value factor to address and compare its significance with the other attributes. As for the resale price, Propfe et al. (2012) stated that green cars would be more economical due to a higher possible resale price compared to conventional cars. However, the situation in the Malaysian car market shows otherwise, as mentioned above. Although Coffman, Bernstein and Wee (2015) indicated that consumer car purchase choices must be assessed with a full evaluation of ownership costs components, including depreciation costs, fuel prices and maintenance, and Letmathe and Soares (2017) found that several costs such as resale price are not yet integrated into the existing literature.

Therefore, some neglected elements such as resale price and fuel prices besides inconsistent outcome factors were found in both personal and social factors. In order to fill these gaps, when predicting market choices, including a diverse range of products and services, the theory of consumption values is applicable. To evaluate consumer behaviour, a total of five independent multi-dimensional values were identified in theory (Hur et al., 2012; Suki, 2016; Ramayah et al., 2018; Sheth et al., 1991a; Zailani et al., 2019). As a whole, by introducing new dimensions to each value based on the categories, this paper improved the model of the theory of consumption values. The resale price as a new dimension was introduced for the first time under functional value in the context of green cars. Green self-identity, presented in the Malaysian context under symbolic value, is a new dimension. Self-expressive benefits examined under emotional value, also is a new dimension. Variety-seeking, for the first time in the context of green cars, is a new dimension presented under epistemic value. Fuel prices, as a new dimension, were shown for the first time in the context of green cars under conditional value.

Introducing new factors could fill both practical and theoretical gaps and extend the discussion into a new context in the context of consumer behaviour towards green cars in Malaysia. The finding could benefit policymakers and automotive industry marketers to make use of the present research results in improving the sales of green cars, which will lead to better development of the transportation sector in Malaysia. In this regard, this paper aims to develop a reliable model of consumers' intention towards green cars. Furthermore, to assure that the construct items of the presented conceptual model represent the factors correctly, this paper involved content validity tests. Firstly, a pre-test procedure was carried out, which considers feedback from the experts and their comments on the developed instrument to confirm that the factors under study are represented by the used items. Subsequently, the pilot study tested the internal consistency and the exploratory factor analysis (EFA) to verify the reliability of the constructs and the model overall.

Literature Review

Green cars are cars that are powered by substitute types of fuels such as electricity, hydrogen, natural gas, biofuels and alternative types of engine systems that include hybrid, plug-in hybrid and fully electric engines (Beltramello, 2012). Green consumer behaviours can be divided into two categories: energy consumption decline or what is known as cutting behaviour, and green purchasing choices which involve switching towards environmentally friendly products (Khan et al., 2020). Attitudes and intentions of consumers could influence actual behaviour towards green consumption (Nguyen et al., 2019). Green purchase intention is an innovative concept that is used to refer to the aim of purchasing a product categorised as 'green'. Green purchase intention as defined by Rashid (2014, p. 134) is "conceptualized as the probability and willingness of a person to give preference to products having eco-friendly features over other traditional products in their purchase considerations". Moreover, Chuah & Lu (2019); Kataria, Kataria, & Garg (2013) found that attitude was the primary indicator of the consumers' behaviours in buying and selling. Therefore, the more favourable the situation, the more likely a customer is of buying environmentally friendly products.

Factors Affecting Green Car Purchasing Attitude and Intention

Functional value was defined in the theory of consumption values, as "the perceived utility acquired from an alternative's capacity for functional, utilitarian, or physical performance. An alternative acquires functional value through the possession of salient functional, utilitarian, or physical attributes. Functional value is measured from a profile of choice attributes" (Sheth et al., 1991b, p. 160). Many earlier studies have demonstrated that functional value has a positive effect on green buy performance (Biswas & Roy, 2015; Han et al., 2017; Lin & Huang, 2012; Ma et al., 2018; Rahnama, 2017; Suki & Suki, 2015; Wen & Noor, 2015; Zailani et al., 2019). On the contrary, an insignificant effect of functional value on consumers' behaviour was also found in other studies (Awuni & Du, 2016; Suki, 2013; Yoo et al., 2013). Functional value typically indicates the received value in terms of product quality and price (Han et al., 2017; Sheth et al., 1991b; Suki, 2013; Teoh, 2015; Zailani et al., 2019). Similarly, Ngah, Hanafiah, Talib, Zulfakar, & Asri (2020) have emphasised the importance of price on consumers' purchase behaviour.

Like the price, the resale price or depreciation value is also one of the elements in the total ownership costs' model of the car. (Palmer et al., 2018). Not only in the perspective of cars, Chu and Liao (2010) and Liao and Chu (2013) stated that if the resale price of the products was higher, in the future consumers would consider buying a similar product as the outcome could make more returns from reselling. Consumers can therefore perceive that they now pay less. In the context of cars, when the price of the pre-owned car is higher, it makes high quality and valuable purchases from the consumer perspective.

On the contrary, green cars are usually lower than conventional cars in the same category of

model in Malaysia. Consumers are thus able to apply functional value and begin assessing green or conventional cars' benefits and disadvantages. In general, the value (price and quality) of green cars could be much more beneficial. However, if the consumer focuses on the resale price, conventional cars are more valuable. Green cars generally depreciate over 70% of their purchase price, and the value of conventional cars is significantly greater. Therefore, low resale prices could be the major factor in discouraging consumers from owning the green car, which also explains Malaysia's low sales trend, including the price and quality factors that make up functional value.

Sheth et al. (1991b, p.161) defined symbolic value as “the perceived utility acquired from an alternative association with one or more specific social groups. An alternative acquires social value through association with a positively or negatively stereotyped demographic, socioeconomic, and cultural ethnic groups. Social value is measured on a profile of choice imagery. Han et al. (2017) and Wen and Noor (2015) show that consumer behaviour has not been significantly affected by social value. In addition, Barbarossa et al. (2015), Grewal et al. (2000), and Hagman et al. (2016) have stated that the social benefit of green car owners can be gathered by green identity. Many earlier studies showed that social value has different impacts on consumption behaviour in green cars. Thus, the proposed model of this paper involves symbolic value with green self-identity as a new dimension.

According to Sheth et al. (1991b), the emotional value reflects the feelings of the product purchase. Either positive or negative feelings can occur. The positive impression is nostalgia, faithfulness, and enthusiasm. Wrath encompasses guilt, hatred, and fear as negative feelings. Suki and Suki (2015) stated that it would encourage consumers to buy green products through the emotional values involved. This is because consumers assumed that they played their part in the protection and sustainable development of the environment. Many previous studies reported various findings on emotional values and consumer choices. Some researchers show that emotional value has a positive effect on consumer choice in green products (Awuni & Du, 2016; Hur et al., 2012; Lin & Huang, 2012; Ma et al., 2018; Wen & Noor, 2015; Wong et al., 2019; Yoo et al., 2013; Zailani et al., 2019), yet others argue that emotional value has no effect on actual consumer purchasing behaviour (Han et al., 2017; Suki, 2016; Rahnama, 2017). When buying a car, the level of comfort and security provided by the car may be associated with emotional value. In other words, if the comfort provided by a green car is high, the motorist is more likely to buy a green car. Moreover, consumers were more satisfied with their environmental concerns by purchasing green products based on Hartmann and Apaolaza-Ibáñez (2012). These conclusions coincided well with Belz and Dyllik (1996), who stressed that the socially visible consumption of green products could arouse consumers' self-expressive benefits by increasing their sense of satisfaction. Thus, the self-expressive benefits is presented in the model as a new dimension of the emotional value.

Sheth et al. (1991b, p. 162) defined the epistemic as “the perceived utility acquired from an alternative’s capacity to arouse curiosity, provide novelty and satisfy a desire for knowledge.

An alternative acquires epistemic value by questionnaire items referring to curiosity, novelty, and knowledge”. Some authors have stressed that epistemic value plays an essential role in shaping green consumer behaviour. Consumers with the epistemic value can immediately buy the product without taking other consumer values into account. In relation, many consumers are shopping for technology, gadgets, and fashion items that want to be new without a particular need. Previous studies showed various influences on consumer intention or decision-making. For example, some researchers have found that the novelty value has a positive impact on consumers' intention to purchase green products (Biswas & Roy, 2015; Lin & Huang, 2012; Ma et al., 2018; Suki, 2016; Rahnama, 2017; Suki & Suki, 2015; Wen & Noor, 2015; Wong et al., 2019; Yoo et al., 2013; Zailani et al., 2019). Other scholars, by contrast, argued that product novelty does not affect consumer intention towards them. (Awuni & Du, 2016; Han et al., 2017; Hur et al., 2012). According to Sheth et al. (1991a, p.63), variety-seeking patterns usually promote product search and behavioural changes in consumers' purchasing behaviour. Katz and Lazarsfeld (1955) claimed that consumers generally modify their preferences and try new products.

Furthermore, Haines (1966) found that a small number of buyers have purchased new products to meet their needs to alter or to try new products. In green products, however, the concept of variety-seeking is still scarce. (Wu et al., 2017). Variety-search is therefore a missing factor from the consumption values' theory, which in previous studies has not yet been taken into consideration while applying the theory, and this paper wants to deal with this gap by making it one of the epistemic value dimensions.

Since the 1970s, the influence of conditional value on human behaviour in marketing has been extensively studied. Belk (1974) stated that the essential elements defining conditional values were the time, place and context. Sheth et al. (1991b) explained that the conditional value involves external factors that prompt changes in consumers' behaviour, and they defined the conditional value as “the perceived utility acquired by an alternative as the result of the specific situation or set of circumstances facing the choice maker. An alternative acquires conditional value in the presence of antecedent physical or social contingencies that enhance its functional or social value. Conditional value is measured on a profile of choice contingencies”. Biswas and Roy (2015), who are leading researchers in sustainable products, have explained the importance of conditional value in shaping the behaviour of sustainable consumption, affecting buying decision-making and affecting the environment. Wang et al. (2013) also explained that in many products and services, conditional value is found primarily in a particular context. The findings from Bayer and Ke (2013) and Samson and Voyer (2014) are consistent with the results, where consumers have purchased products for special terms and conditions. The current market trend, for example, stresses that green products are less environmentally harmful as the conditional value affected the consumers' choice by considering the environmental consequences (Lin & Huang, 2012). Likewise, Lim et al. (2019) also found that an environmentally friendly indicator for a person who has chosen green products rather than conventional products, is the most reliable.

As mentioned earlier, Sheth et al. (1991b) indicated that the external environment mainly caused the conditional values. In this regard, Coffman et al. (2015) and Lin and Hsu (2015) introduced a group of external factors that affected the consumers' purchasing behaviour toward electric cars. The external dimensions or factors include government policy, sale promotions, and environmental consequences. Furthermore, Diamond (2009) concluded that fuel prices had the highest significant effect on car market growth. Also, Lim et al. (2019) found that the majority of Malaysian consumers preferred green cars if the fuel price increased. However, to the best of the authors' knowledge, this is one of the first studies which examined the influence of fuel prices on consumers' inclination to purchase green cars in Malaysia. Thus, this paper extended the theory of consumption values by adding fuel price as one of the conditional value dimensions.

The Mediating Effect of Attitude Towards Green Cars

Widespread adoption is ultimately dependent on the consumer's attitude, whether they like or dislike it (Egbue, Long, & Samaranayake, 2017). Green products are generally supposed to be an expensive kind of goods (Nasir & Karakaya, 2014). Green products' high prices are considered as one of the chief barriers of spreading them. However, Tanner & Kast (2003) argued prices itself do not play a decisive role in purchasing green products, as long as customers like the product. For the relationship to buy a green car, Adnan *et al.*, (2018); Afroz, Rahman, Masud, Akhtar, & Duasa, (2015d); Barbarossa *et al.*, (2015); Degirmenci & Breitner, (2017); Han *et al.*, (2017); Jayaraman *et al.*, (2015a) confirmed that there is a secure connection between consumer's attitude and intention towards green cars in the countries and consumers they had examined. In the context of green cars, to the best of the researcher's knowledge, only two studies have inspected the mediating role of attitude as the mediator between the consumption values and consumer's intention in the context of green cars (Han *et al.*, 2017; Nor & Wen, 2016). Researchers have found that attitude mediates the relationship between consumption values and consumer behaviour. Furthermore, resale price, green self-identity, self-expressive benefits, and fuel prices could be critical factors that affect the consumer's attitude towards green cars. This paper, therefore, presents attitude as a mediator to assess the effect of the new dimensions. Furthermore, the acceptance of green cars is still very low, which requires studying consumers' preference.

Based on the above discussion, this paper proposed a conceptual framework of consumption values impact on consumers' attitude and intention to purchase green cars. Accordingly, the hypotheses of this paper are formulated as below:

- H1: Functional value positively affects consumer's attitude towards green cars.
- H2: Symbolic value positively affects consumer's attitude towards green cars.
- H3: Emotional value positively affects consumer's attitude towards green cars.
- H4: Epistemic value positively affects consumer's attitude towards green cars.
- H5: Conditional value positively affects consumer's attitude towards green cars.

H6: Consumer's attitude towards green cars will mediate the relationship between functional value and intention to purchase green cars.

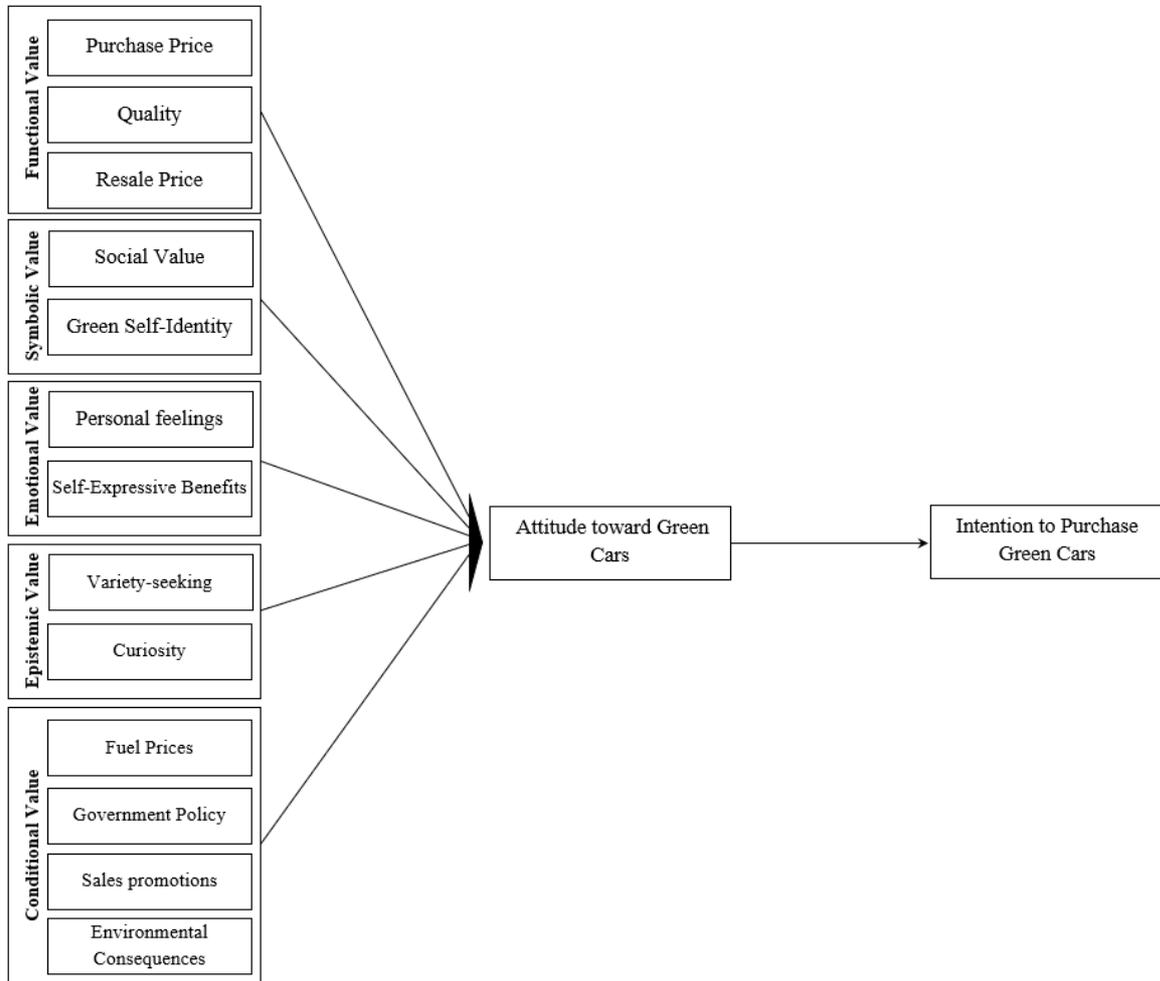


Figure 1: The proposed framework

Methodology

This paper used a quantitative method for data collection in Malaysia. First, four items were adapted from Adnan et al. (2018) to measure consumer intention towards green cars, Second, as reported in Taylor and Todd (1995), four items were adapted to measure consumer attitudes towards green cars. Then, twelve items were used to measure functional values from Lin and Huang (2012). Next, seven items were adapted from Barbarossa et al. (2015) and Lin and Huang (2012) to measure the symbolic value. The emotional value was also measured by six items adapted from Hartmann & Apaolaza-Ibáñez, (2012, and Lin & Huang, (2012). Besides emotional value, twelve items were adapted to measure the epistemic values (Agarwal & Karahanna, 2000; Irani & Hanzaee, 2011). Finally, 16 items were employed to measure the conditional value (Barbarossa et al., 2015; Han et al., 2017; Lin & Huang, 2012; Paswan et al., 2014). All the items were measured on a 7-point Likert-scale.

To ensure that the items correctly represent the factors before data collection begins, content validity was executed. Sekaran & Bougie, (2016) stated that content validity refers to the extent of how measures constitute an adequate and representative set of items that cover research concept, by distributing the questionnaire to the experts for their review and feedback. In order to assess the validity of the survey questionnaire, experts from the academic field and industry review and modify to confirm that the contents of the questionnaire are acceptable (Sekaran & Bougie, 2016). Specifically, the content validity in the present study involved getting the experts to feedback about the prospective questionnaire.

Essentially, the experts' feedback and comments about the developed instrument are important to ensure that conducts' pre-test is serving the purpose of the study and representing the factors under study. Moreover, as Oliver & Lee (2010) stated, cars are a high involvement product, and the expert's views from both academic and industry parties were needed. The pre-test procedure was carried out through sending two types of the pre-test form to the academic experts. An online form through google form platform for the expert's convenience was sent to ten academic experts who are specialists in marketing and had a high impact published papers that utilised the theory of consumption values or wrote about green cars. Moreover, another ten forms were self-distributed to the salespersons in the auto dealers' showrooms in northern Malaysia.

There were some comments and suggestions from both academic and industry experts. For example, Professor Suhaiza Zailani who has published on green behaviour and the theory of consumption values and one of the pioneer experts at the Faculty of Business and Accountancy in University Malaya, suggested adding screening questions before the respondents answer the rest of the questions, to ensure whether they are using or familiar with the green car, to ensure they are representing the targeted criteria of respondents and they can fill the questionnaire. Additionally, there was some linguistics comment about some words and phrases. Thus, most of the comments and suggestions were considered and implemented in the final version of the questionnaire.

After considering the experts' comments in the pre-test, the pilot test was performed, where the instrument was distributed to a smaller sample size. The pilot test of this study aimed to remove any doubt about the instrument's reliability and validity. The final study includes the suggestions obtained from the pilot study. Respondent sampling is based on purposive sampling as the selection of respondents should be conducted in the best position to provide the data needed (Sekaran & Bougie, 2016). Furthermore, Cooper & Schindler (2014) suggested that the pilot sample size could range between 25 and 100 subjects. In this study, 57 valid questionnaires were collected from car showroom visitors in northern Malaysia. The researcher met the participants while they were filling the questionnaire to assist them in identifying any difficulties in wording, checking the ease of completion, and to answer if there were any enquiries. The reliability test for each variable's items was calculated using the pilot study data.

Analysis and Discussion

The reliability test was carried out to test the internal consistency of the scales using Cronbach's Alpha reliability coefficient. Each participant in the pilot study took approximately around 20 minutes to fill the entire questionnaire form. Reliability ranging from 0.882 to 0.960 is generally sufficient for research purposes so that the scales can be considered as highly reliable (Hair, Black, Babin, Anderson, & Tatham, 2006) as the seven variables were higher than the suggested value of 0.60, as shown in Table (1). The reliability test, therefore, confirmed the validity and reliability of the proposed framework.

Table 1: Reliability Coefficient for Multiple Items in Pilot Study (n=57)

No.	Variables	Cronbach's alpha	No. of Items
1	Intention to Purchase Green Cars (PI)	0.930	4
2	Attitude Towards Green Cars (ATT)	0.960	4
3	Functional Value (FV)	0.940	12
4	Symbolic Value (SYV)	0.882	7
5	Emotional Value (EMV)	0.944	6
6	Epistemic Value (EPV)	0.889	12
7	Conditional Value (CV)	0.939	16

In order to test the model, the exploratory factor analysis (EFA) was included in the current study. (Xiao & Kim, 2009). Joseph F. Hair Jr, William C. Black, Barry J. Babin (2019, p. 25) defined EFA as “a statistical approach that can be used to analyze interrelationships among a large number of variables and to explain these variables in terms of their common underlying dimensions”; the correlations among variables are suitable for factor analysis. We examined the Kaiser-Meyer-Olkin (KMO) and Barlett's test of sphericity to determine the feasibility of factoring.

The KMO of this study was 0.848-0.500, and the Barlett result of $p < 0.05$ indicated the data was factorable. Then, the assessment of the factor loading, two items have been deleted from the epistemic value due to the low loading. Lastly, Pallant *et al.* (2016) indicated the variance of each factor must be greater than one, which was achieved in all constructs. Thus, the model meets the exploratory factor analysis (EFA) criteria as conducted individually for each variable (Kline, 2015), and Table (2) reviews the findings.

Table 2: Summary statistics of exploratory factor analysis

Constructs	No. items	Dimensions	Factor loadings range	KMO	Total variance explained			Items deleted
					Total	% of variance	Cumulative %	
PI	4	UNI	.925-.892	.780	3.336	83.394	83.394	0
ATT	4	UNI	.924-.795	.809	3.589	89.719	89.719	0
FV	12	Purchase price	.897-.792	.790	2.830	70.740	70.740	0
		Quality	.924-.795	.821	3.023	75.587	75.587	0
		Resale price	.931-.881	.808	3.254	81.348	81.348	0
SYV	7	Social value	.913-.780	.684	2.970	74.262	74.262	0
		Green-self identity	.952-.903	.737	2.605	86.833	86.833	0
EMV	6	Personal feelings	.932-.878	.730	2.486	82.861	82.861	0
		Self-expressive benefits	.958-.924	.749	2.661	88.694	88.694	0
EPV	12	Variety-seeking	.895-.633	.818	4.626	51.396	51.396	2
		Curiosity	.924-.795	.711	2.308	76.935	76.935	0
CV	16	Fuel prices	.998-.697	.801	3.375	67.501	67.501	0
		Government policy	.932-.647	.844	4.518	75.297	75.297	0
		Sales promotions	.941-.941	.500	1.772	88.619	88.619	0
		Environmental consequences	.965-.943	.766	2.739	91.301	91.301	0

Conclusion and Recommendations

In conclusion, to ensure accurate results when collecting the primary data, it is essential to provide a valid and reliable tool. In this respect, two tests were carried out in the current study: a pre-test to determine the measurements' validity and a pilot test to confirm the measurements' reliability. In the pre-test, academic experts and practitioners' comments were used to rephrase and modify items. Moreover, some significant findings were discovered in the pilot test: the answer rate was 100% high, of 61 items, 59 were reliable and were adequately matched to their constructions, and on average it took 15 to 20 minutes for respondents to fill in the questionnaire. This study, therefore, provides valid and reliable assessments that will provide researchers with a better understanding of the behaviour of consumers about green cars. Theoretically, there are four contributions to the body of knowledge: first, introducing measures for functional values' new dimensions such as the items of resale price, and fuel prices; this is limited in the literature. Second, researchers can use such measures to investigate the behaviour of consumers in many types of products. Thirdly, these measures may be used in testing for regression or in modelling structural equations. Fourthly, the items of the questionnaire instrument can be transformed into open-ended questions for use in qualitative or mixed studies. Practically, automakers and dealers



can use the data collection instrument to consider the most impact factors that affect consumers' decisions to entertain them at both industry and marketing levels.

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