

A Study on Hybrid Car Purchasing Intention

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Abstract

The protection of the environment has become one of the main challenges nowadays. Due to the globalization and expansion of industries, the natural environment and resources are facing serious threats, such as climate change, global warming, and air pollution. Maintaining our natural environment safely is one of the most important challenges of the century. Consumers are becoming aware of the environmental issues and know their impact on the surrounding environment. Green marketing is a concept, which although developed initially in developed countries, such as the USA and Japan, it has become more popular in other parts of the world. The automobile industry is one of the main culprits for the worsening environmental issues. The amount of CO₂ emitted from cars has a major influence on climate change and air pollution. Hence, it is essential to motivate customers to purchase green products, such as hybrid cars. This study considered four main factors that affect the purchasing intention of a hybrid cars— price sensitivity, environmental awareness, green perceived value and green trust. A quantitative survey was given to 380 respondents in universities in Malaysia. The data were subjected to statistical analyses with SPSS. Multiple linear regression was used to analyze the influence of the four factors on the intention to purchase a hybrid car. The results show that price sensitivity and green trust have a significant impact on hybrid car purchasing intention while there is no such impact from green perceived value and environmental awareness.

Keywords: sustainability marketing, green marketing, ecology marketing, hybrid car, purchase intention

1. Introduction

1.1 Background of Study

The protection of the environment has been a concern since the last century, and now, in the 21st century, the world faces major unresolved issues, such as the large expansion of industries and the concomitant consumption of natural resources (Adler and Parmryd, 2010). The warning signs from the existence of extensive pollution and usage of natural resources are evident to humans. There should be an equal effort in every part of the world due to future outcomes. At the end of the 1980s, a new kind of marketing started to register as people became sensitized to go “green.” The awareness regarding environmental protection increased in comparison to the 1970s, and, during the 1990s, a considerable transformation took place to generate the green environment (Chahal et al., 2014a). Nowadays, many people around the world are gaining awareness of the environmental issues caused by industrial activities. In addition, companies are now feeling more responsible toward the environment and strive to manufacture products that are environmentally friendly (Kotler, 2011). Since environmental issues are becoming more crucial for people, companies are becoming more interested in green marketing and green products to fulfill their social responsibility. From the 1980s onwards, marketers have striven to identify and promote the factors that motivate consumers to buy environmentally friendly products (Vedava, 2014). Researchers believe that the main goal of marketing should be to enhance the quality of human life, and that marketers should try to optimize people’s buying intentions through the right marketing strategy. The quality of life is not only related to meet the needs, demands, and desires, and satisfaction is not only through the quality of goods and services, as the environment we are living in should have a certain level of quality (Fraj et al., 2013). Environmental pollution has become severe, and people around the world have started to feel its negative effects. To reduce pollution, people worldwide should unite and generate substantial funds for both research and practical implementation (Dief and Font, 2010). The relation between marketing and ecology is described by different terms— ecology marketing or green marketing – which comprises consumers, companies, and governments.

The key role of green marketing is to create awareness about environmental pollution and the associated concerns that make it more severe (Kumar, 2015). People should be educated and trained to provide a sound basis in ecological behavior that focuses on consumption behavior, and identifies the environmental liabilities. Consumers should be aware that the green products and services that have an ecological basis are costly and expensive. They should also be trained and educated to understand that it is better for the environment and their health to use green products even if they are more expensive. Such support for green products might involve paying a surcharge (Eichholtz et al., 2010).

1.2 Introduction to the Problem

The global automobile industry generates a large proportion of greenhouse gasses, especially CO₂. Cutting the usage of this gas is imperative to protect the planet. Therefore, increasing the awareness concerning the use of green products is very important for marketers, because, by doing so, they can promote cars that consume green energy that protects the environment and increases the chance of superior sales of the product. The term green marketing concentrates on resource utilization and environmental protection. In addition, green marketing is not only about how to market hybrid cars, it includes the first step of resource utilization, production, design, selling, and even the culture of using hybrid cars (Yeng and Rashad Yazdanifard, 2015). Previous studies only focused on how to sell the cars with green energy to the consumers and did not consider the sustainable use of resources. Now, marketers have started to realize the importance of improving the culture of using green products with the main objective being to reinforce the ecological environment. It is necessary to devise a marketing strategy that motivates consumers in terms of the usage of green products, such as hybrid cars (Yazdanifard and Mercy, 2011). Although developing countries, such as Malaysia, have started to learn more about green products, green energy, and environmental protectionism, the culture of using green products remains unclear in such countries. The consumers in developing countries do not consider themselves responsible for the environment, perhaps due to insufficient green marketing strategies at the wrong time or when there was no high demand in the market. Similarly, when the demand for green products is not high, companies will not be interested in entering the market. People need to gain trust regarding the use of green products (Sandeem, 2009). Previous studies focused on behaviors and product features and were limited to products that have low consumer involvement; hence, influential factors remain unstudied, such as perceived value, culture and the purchase intention of the consumers. Marketers and researchers have not given adequate attention to the purchase behavior and purchase intention of green products in the automobile industry (Rahbar and Abdul Wahid, 2011), as their main focus was limited to how to offer the product in the market. Researching customers' intention is a very important factor of actual behavior and actual consumers' decision-making towards hybrid cars. Therefore, this study aims to concentrate on predicting consumers' intention to purchase hybrid cars to increase the culture of using green products (Nadaf and Nadaf, 2014). This research is conducted to evaluate the factors that contribute to hybrid car purchasing behavior. Thus, it can help both sides – supply and demand – to have a deeper understanding of the purchase intention of hybrid cars.

1.3 Green Purchase Intention in the Automobile Industry

Green consumption is the consumption of environmentally-friendly products that cause less harm to the environment, such as hybrid vehicles that consume less power than normal ones. A hybrid car system is a combination of a normal petrol engine and an electric motor. The main advantage of a hybrid car is that it consumes less fuel and produces less carbon dioxide than other non-hybrid automobiles. In addition, some types use solar and wind power to store electricity (Karunanayake and Wanninayake, 2015). There are three main types of hybrid, all of which function like a conventional automatic car (Wen and Noor, 2015). For the past two decades, going green has attained more prominence for most of the automotive companies around the world. According to Oliver and Lee (2010), certain factors, such as cultural orientation, self-image, and social value, have an impact on those who decide to go green. Moreover, the same study shows that people in Asia are practicing more collectivism and tend to perceive that environmental values are related to altruistic and traditional values, and that such behavior motivates consumers to acquire knowledge about environmentally friendly products and avoid companies that are famous for pollution (Oliver and Lee, 2010). The same research indicates that green consumers have the purchasing intention of hybrid cars due to the social status or self-image that they are seeking. Brand attitude has an impact on the purchase intention of consumers in the way that a brand demonstrates its concern about being environmentally friendly, thereby giving it a better chance of being chosen by its consumers than its competitors (Huang et al., 2014).

According to the same research, purchase intention can be affected by many other factors, such as the positive attitude of the consumer towards the green product, which can directly increase the purchase intention.

1.4 Hypothesis Development

1.4.1 Price Sensitivity

It is very important to determine the level of a consumer's greenness. This means that marketers should know the extent that consumers tend to have green purchase intention. According to a study in 2014, the level of greenness is the extent to which "consumers would prefer to choose a green product over one that is less friendly to the environment when all other things are equal" (Razak et al., 2014). The predictor of price is one of the main barriers to people going green, as the perceived additional monetary cost is a major limitation to having green purchase intention. In addition, the wrong pricing strategy has a negative influence on the intention and internal motive of consumers to go green. A few studies consider price as being one of the factors that may increase the willingness of consumers to purchase green products (De Craecker and De Wulf, 2009). Marketers should first know about the industry, the nature of the product and the target customers, and then develop an effective pricing strategy. Pricing can have a positive effect on the perception of consumers in the way that they believe they are saving on running costs by buying a hybrid car. Marketers might introduce the same pricing strategy, but the way they present it to their customers is very important. The same price promotions may have a different effect on the purchasing intention of consumers and may change their perception of the offered price. Price framing, which refers to how the offered price is communicated to consumers, is very important for marketers. Effective price framing may decrease the perceived risk of product performance and might increase the purchasing intention of consumers (Bekk et al., 2015). Consumers have a positive perception of lower prices, and some consumers favor promotions framed as a discount. Price promotion has a significant influence on the consumers' evaluation of the deal and may help increase sales (Rehman and Dost, 2013). One of the most crucial factors in buying a green product for consumers is the price. One reason that makes price a crucial factor is that when green products, such as hybrid cars, are priced highly, it can lead to loss off-market acceptability. Accordingly, marketers must be careful in selecting a market segment to pay for a green product even if the product price is high. Depending on the type of product, there is a particular rate of price increase, which marketers must be aware of and take into consideration when determining the price for green products. All in all, even the greenest consumers may show less consideration for environmental characteristics when it comes to paying a high price for environmentally friendly products, such as hybrid cars (Ong et al., 2012). A hybrid car consumer wants to be seen to be helping the environment, but, those who have a lower degree of greenness, will pay more attention to the price, as their perception of green products is that they are expensive and costly. Conversely, those consumers who have a higher level of greenness are more willing to pay for the green products.

H1: Price sensitivity has a positive and significant impact on the hybrid car purchasing intention in Malaysia.

1.4.2 Environmental Awareness

Environmental awareness refers to environmental concern and eco-knowledge in which environmental concern is based on the eco-knowledge, which, in turn, is the basic knowledge about the ecology of the earth and environment. The knowledge consumers possess has a significant positive influence on their behavior. As there is a positive link between the actions of consumers and their knowledge, ecological knowledge is associated positively with acting and behaving ecologically. Ecological knowledge is basically knowledge about the evaluation of the product's effect on the surrounding environment. When people have knowledge about the environment, they start evaluating a product according to its benefit or damage to the environment, which is called ecological knowledge. The green purchase intention of the consumers can be influenced by their knowledge regarding the environment (Dehghanan et al., 2014). Environmental awareness has been an important issue in recent years. In the early 1960s, environmental concern was more directed at becoming greener, controlling pollution and power conservation. Later, it focused on recycling, avoiding the waste of natural resources, green packaging, redesigning the products, and producing renewable products. However, since the 1990s, environmental concern underwent a major evolution and became one of the most important topics of debate among societies, universities, and governments around the world. It went beyond air pollution and recycling, and evolved into behavior and intention. Some developed countries, such as the USA and certain European countries, as well as some Asian countries, like Japan, started to realize the significance of the environment in terms of the purchasing intention of consumers, which is related to green marketing (Chahal et al., 2014a).

The environmental impact became the main consideration for consumers in their daily purchase decisions. Governments have also been forced to issue specific policies regarding environmental conservation while people have started to believe that it is everyone's duty to take care of the environment (Chen, 2010). Green consumers are affected by environmental knowledge, which, in turn, influences their behavior. Unfortunately, most people have no knowledge about environmental issues, and, hence, do not act responsibly (Harvey, 2015). Environmental knowledge refers to the information that a consumer has about environmental issues that make them concerned about the ecosystem, and the issues and factors affecting it. Having environmental knowledge would have a significant influence on consumers' intention to buy green products. Recent studies have noted that, in New Zealand, 84% of consumers are concerned about environmental issues and that this affects their purchasing behavior and consumption. Moreover, many of the consumers perceive that if they are willing to pay a premium price, they expect better features and functionality from the product or service, and that it is not only the environmental friendliness of the product that matters (Yusof et al., 2013). Purchasing green products makes people feel that they are responsible towards the environment and they adopt this responsibility as a proactive role in the society. Green products and green marketing are becoming more interesting for industries, manufacturers and companies because they have found it presents a major opportunity to develop new products and services that not only meet the demands of consumers but also meet the requirements for a healthier environment (Hosein, 2012). Environmentally friendly products are receiving more attention from consumers. Apart from the consumer's duty towards the environment, they like the feeling that people look at them differently in that they pay more to purchase a product because of the motivation to save the environment (De Craecker and De Wulf, 2009). Hybrid car buyers are willing to pay more for the product to protect the environment. Green consumers are paying more attention to environmental choices than fashion choices. When consumers become more aware of the threats to their surrounding environment, they become more motivated to purchase green products.

H2: Environmental awareness has a positive and significant impact on the hybrid car purchasing intention in Malaysia.

1.4.3 Perceived Green Value

The perceived value of a green product is termed the green perceived value (GPV), which refers to a consumer's perception of the features, benefits or performance of an environmentally friendly product, and it is one of the factors that can shape the image about a purchased product in a consumer's mind (Chen and Chang, 2012). Simply put, the green perceived value is the perception of a consumer about what he/she can get by purchasing a green product (Pelozo and Shang, 2011). The greenness of a product itself and being environmentally friendly does not guarantee the sale of a green product. Green perceived value is very important to create a long-term relationship between companies and consumers. It has a significant influence on maintaining a customer relationship. There is a significant relationship between perceived value and green purchase intention. It is the set of attributes of the products that create the perception of consumers. Hence, when consumers have a good perception about a green product, the value of the product in their mind will be high, and they will spread through positive word-of-mouth to others, which has an effect on the green purchase intention of consumers (Chen and Chang, 2012). Green perceived value can also increase the trust of consumers. Previous studies show that green purchase intention has a positive relationship with green perceived value (Jaafar et al., 2012). In order to maximize the green perceived value companies strive to increase consumers' knowledge (Huang et al., 2014). The purchasing intention of consumers of hybrid cars may not be guaranteed by the greenness of the hybrid car itself. Consumers evaluate the value of the hybrid car, and the perceived value of the product is very important for them. There are other attributes for the hybrid car that shape the perception of the consumers, and it is these attributes that shape the perceived value of this product. One of the most important values of hybrid cars is the much slower depreciation than normal cars that consume petrol (Mazar and Zhong, 2010). This is because hybrid cars will be in high demand for a longer period of time, and, hence, represent a good investment for consumers. Today, in most developing countries, this market has around a 5% share, which shows an increase from 0.4% in 2004 (Kinoti, 2011).

H3: Green perceived value has a positive and significant impact on the hybrid car purchasing intention in Malaysia.

1.4.4 Green Trust

Trust can be defined as the level of willingness to depend on one object based on the expectation of its ability, reliability, and benevolence, or, in other words, it is the intention to accept vulnerability based on the positive expectations of the integrity and capability of others.

Green trust is defined as the willingness to depend on a product or service based on the belief or expectation resulting from its ability and credibility about environmental performance (Chen, 2010). Trust has a significant influence on consumer purchasing intention. Green trust is affected by the environmental friendliness of the green products (Chen and Chang, 2013). If the companies fail to meet the requirements of being environmentally friendly, or exaggerate the greenness of their products, distrust will ensue between the consumers and the companies. According to Chen and Chang (2013), recently, because of the failure of some companies regarding the greenness of their products, consumers are not willing to trust them anymore. Green consumers evaluate green products first, and if they find them environmentally friendly, they may trust the company (Ramayah et al., 2010). The most crucial factor for consumers to have green trust in a product stem from its specification. It should cause less harm to the environment, and, in some cases, the products have to be recyclable. The most important factor that can breach green trust is exaggerating the information given about the environmental performance of the product, which can lead customers to not trust the company anymore. Consumer satisfaction has a direct impact on consumer trust. It is a well-known fact that most satisfied customers have a long-term relationship with the brand, and, hence, it is obvious now that green trust is a key aspect for building loyalty (Chen and Chang, 2012). Thus, consumer green trust has a high impact on consumer purchase intention, and consumer trust is an antecedent of customer purchase intention (Chen and Chang, 2013). Another benefit of green trust is that it has an effect on the minds of consumers, and may lead to positive word-of-mouth.

H4: Green trust has a positive and significant impact on the hybrid car purchasing intention in Malaysia.

1.5 The Conceptual Model

In the experiment for this research paper, dependent and independent variables have been created in order to develop the proper structure that will provide a proper direction for the study of hybrid car purchase intention, which will result in providing a better understanding of green marketing and the green purchase intention. The following is the framework used to test the variables generated in this research paper.

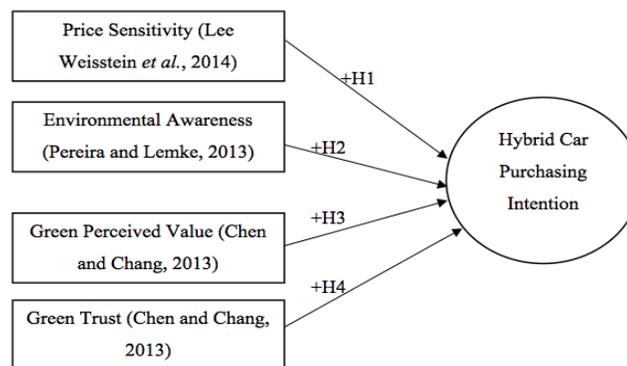


Figure 1: Research framework

2. Materials and Method

2.1 Sample and Data Collection

The element of this research targeted students studying in Malaysia. Accordingly, two universities one private and one public – Asia Pacific University (A.P.U.) and University Teknologi Malaysia (U.T.M.) – were selected to conduct the research. As the study shows, the extent of research was Kuala Lumpur, Malaysia. The time for publishing and collecting surveys took place between May and June 2016. The size of the sample for this research was 380 people. This size was deemed appropriate for providing an open and broad viewpoint regarding Hybrid car purchasing intention in Malaysia, and adequate information about the perception of different kinds of people about green purchasing intention. Questionnaires were distributed in one private and one public university in Kuala Lumpur. Meanwhile, there were many international students in A.P.U., and, hence, the result would be more reliable since it covered a wide range of people.

2.2 Research Design

This was a quantitative research that was evaluated by distributing surveys to the research target sample. To analyze and examine the data, SPSS version 20 was used, which helped to evaluate the data generated and determine the findings. The data collected through the descriptive statistical studies was analyzed and categorized by looking at the frequency and percentage derived from the data collected.

2.3 Measurement

This research used a five-point Likert scale to evaluate the answers ranging from strongly disagrees to strongly agree. The measurement and influential constructs of this study were chosen based on four predictors – price sensitivity, environmental awareness, green perceived value and green trust – all of which were tested against purchase intention.

2.4 Procedure

To be clear about the accuracy of the questions, 30 samples were distributed to the respondents before the main questionnaire distribution and collection. Since all the questions were clear for the respondents, the pilot study questionnaire and the main study questionnaire were identical. Therefore, a total of 380 questionnaires were collected from the local and international students, staff, managers, and lecturers at APU and U.T.M in Malaysia. The survey was carried out with the potential respondents during break times in the cafeteria and collected upon the respondent's completion of all the questions.

3. Results

3.1 Reliability Analysis

Cronbach's alpha is the most familiar and common measure of reliability. Cronbach's alpha implies how well the items are related to each other in a series or group. When the Cronbach's Alpha is closer to 1, it implies that the internal consistency reliability is high. Reliability less than 0.60 is interpreted as poor, whereas 0.70 is considered as acceptable and a reliability over 0.80 is viewed as good (Cronbach and Shavelson, 2004).

Table 1: Reliability-test

| No | Scales | N | No. of Items | Cronbach's Alpha |
|----|------------------------------|-----|--------------|------------------|
| 1 | Price Sensitivity (IV) | 380 | 4 | 0.756 |
| 2 | Environmental Awareness (IV) | 380 | 5 | 0.712 |
| 3 | Green Perceived Value (IV) | 380 | 5 | 0.864 |
| 4 | Green Trust (IV) | 380 | 5 | 0.856 |
| 5 | Purchase Intention (DV) | 380 | 6 | 0.713 |

3.2 Model Summary

The Sig.F Change value in the below table confirmed that the method of multiple linear regression was suitable for the study. In addition, in the model summary table, $R^2 = 0.232$ indicated that the model for hybrid car purchase intention explained 23.2% of the variance by the variables in this study.

| Model Summary ^b | | | | | | | | | |
|----------------------------|-------------------|----------------|-------------------------|--------------------|-----------------------|----------|-----|-----|---------------|
| Model | R | R ² | Adjusted R ₂ | SE of the Estimate | Change Statistics | | | | |
| | | | | | R ² Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .482 ^a | .232 | .216 | .59276 | .232 | 14.725 | 4 | 195 | .000 |

a. Predictors: (Constant), Green Trust, Environmental awareness, Price sensitivity and promotion, Green Perceived Value

b. Dependent Variable: Purchasing Intention

To reach the statistical significance of the outcome, it was essential to check the ANOVA table. This examined the null hypothesis that multiple R in the population equaled 0.0, and showed that the model of our study achieved statistical significance (Sig = .000, this really means $p < 0.0005$). The overall regression model was a good fit for the data. Hence, according to the result.

| | Model | Sum of Squares | df | Mean Square | F | Sig. |
|---|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 20.695 | 4 | 5.174 | 14.725 | .000 ^b |
| | Residual | 68.516 | 195 | .351 | | |
| | Total | 89.211 | 199 | | | |

a. Dependent Variable: Purchasing Intention

b. Predictors: (Constant), Green Trust, Environmental awareness, Price sensitivity and promotion, Green Perceived Value

3.3 Multiple Linear Regression

Multiple linear regression was employed to test the correlation between the independent variables and the dependent variable. As shown in table 2, the F statistic was 14.725, and, based on the sig values, environmental awareness and green perceived value did not have a strong correlation with hybrid car purchase intention as their p-value was more than 0.05.

Table 2: Summary of Multiple Regression Analysis for Purchase Intention

| Variables | Unstandardized Coefficient | | Standardized Coefficient | <i>t</i> | Sig. |
|---------------------------------|----------------------------|------------|--------------------------|----------|-------|
| | B | Std. Error | Beta | | |
| (Constant) | 1.080 | 0.310 | | 3.478 | 0.001 |
| Price sensitivity and Promotion | 0.288 | 0.077 | 0.305 | 3.73 | 0.000 |
| Environmental Awareness | 0.309 | 0.050 | 0.305 | 6.183 | 0.985 |
| Green Perceived Value | 0.365 | 0.056 | 0.355 | 6.464 | 0.850 |
| Green Trust | 0.126 | 0.042 | 0.115 | 2.984 | 0.000 |

R square = 0.232, df = 4, F = 14.725; p = 0.000

3.4 Hypothesis Testing using Multiple Linear Regression

Hypothesis testing concerns the formal course of action applied by statistics in order to accept or reject a statistical hypothesis. The Sig value for the two predictors of environmental awareness ($P > 0.985$) and green perceived value ($P > 0.850$) were more than 5%, which confirmed that there was no significant correlation between these two factors and hybrid purchase intention. However, price sensitivity and green trust had a significant correlation with the purchase intention of hybrid cars. Therefore, H2 and H3 were rejected. The table below provides a summary of the results of this study.

Table 3: Summary of Results

| Item | Hypothesis Statement | R-value – Pearson Correlation | Beta value | P-value | Status |
|------|---|-------------------------------------|---------------|---------|----------|
| H1 | Price sensitivity has a positive and significant impact on the hybrid car purchasing intention in Malaysia. | 0.419 | 0.305 | 0.000 | Accepted |
| H2 | Environmental awareness has a positive and significant impact on the hybrid car purchasing intention in Malaysia. | 0.222 | 0.001 | 0.985 | Rejected |
| H3 | Green perceived value has a positive and significant impact on the hybrid car purchasing intention in Malaysia. | 0.302 | 0.018 | 0.850 | Rejected |
| H4 | Green trust has a positive and significant impact on the hybrid car purchasing intention in Malaysia. | 0.385 | 0.255 | 0.000 | Accepted |

4. Discussion

4.1 Price sensitivity and promotion towards purchase intention

The proposed hypothesis is supported; based on the findings of this research, price sensitivity is the factor that has the most impact on the purchasing intention of hybrid cars. Price sensitivity is one of the major drivers of customers' green purchase intention of hybrid cars in Malaysia. The findings show that price is the factor that can increase the willingness of customers to purchase a hybrid car. It is crucial for marketers to know how to produce pricing strategies to persuade customers to buy hybrid cars. An effective pricing strategy can have a very positive effect on the mind of consumers (Oliver and Lee, 2010). Pricing can have a positive effect on the perception of consumers in such a way that they believe they are saving the cost by purchasing a hybrid car. The findings of this research show that price sensitivity is crucial for consumers. This means that the more marketers work on price sensitivity, the chance of increasing purchasing intention will also increase.

4.2 Environmental awareness towards purchase intention

This hypothesis is not supported by the findings of the research. The environmental awareness concept, which consists of environmental concern and environmental knowledge, do not have a significant influence on the purchasing intention of consumers in Malaysia. Although prior studies show that this hypothesis is supported, in this research, environmental awareness is not a significant factor. Previous studies (Peloza and Shang, 2011) indicate that the environmental factors start to become the crucial and main factor for consumers in their daily purchase decision. Some developed countries, such as the USA, the United Kingdom, Germany and some Asian countries like Japan, have started to realize the significance of the environment on the purchasing intention of consumers in relation to green marketing (Peloza and Shang, 2011). Other studies found that environmental awareness is one of the main motives and drivers in green purchase decision (Oliver and Lee, 2010). There are various factors that might contribute to this result. Past studies show contradictory findings regarding green consumers, which might explain the findings of this study, which does not support the hypothesis. According to Robert (1996), the typical green consumer is "female," "middle-aged," and has "low-income." Therefore, the rejection of this hypothesis might be due to the respondents and sample size.

4.3 Green perceived value towards purchase intention

This hypothesis is not supported by the findings of this research. Green perceived value is related to the evaluation of customers about the green value that he/she can get from hybrid cars. It refers to the perception of consumers in terms of the features, benefits or performance of the environmentally friendly product. GPV refers to the consumer's evaluation of the overall benefits that he/she can gain from the purchase of green products.

Other researchers believe that the green perceived value of green products (hybrid cars) has a significant impact on the purchasing intention (Ong et al., 2012). There are certain attributes of hybrid cars that shape the perception of consumers, and, in turn, these attributes shape the perceived value of this product. The findings of this research, which was conducted in Malaysia, show that the perceived value of the hybrid cars is not the factor that motivates customers to buy hybrid cars. This might be due to the low level of environmental awareness in Malaysia preventing people from determining their value.

4.4 Green trust towards purchase intention

This hypothesis is supported by the findings of this research. This shows that green trust has a significant impact on the purchasing intention of hybrid cars in Malaysia. When the trust is created between a customer and a company, the customer will be more satisfied and is more likely to purchase again from the company.

Green trust is related to the specification of a green product, which consists of less harm to the environment, and reusable products and materials (Chen and Chang, 2013). According to Chen (2010), green trust can be defined as the level of the willingness to depend on one object based on the expectation of its ability, reliability, and benevolence, or, in other words, the intention to accept vulnerabilities based on the positive expectations of the integrity and capability of others. Previous research shows that green trust has a significant impact on the purchasing of green products (Rosenbaum and Wong, 2015). The findings of this research also show that, in Malaysia, people will be motivated to purchase hybrid cars if they have trust in the products. If people are persuaded that hybrid cars have green attributes and meet the requirements for the specification of green products, they will be willing to purchase hybrid cars.

4.5 Research Limitations

The first issue is that this research is only applied among students, employees and staff of APU and U.T.M. The results cannot be generalized to everyone due to the differences in culture, economy, and society. In addition, certain factors are not considered in this research. In future research, to obtain a bigger sample, this research can be applied among all public and private universities in Kuala Lumpur. The second limitation of this research is the time constraint. Because this research was collected in a short time, it cannot be proven if it is reliable over a period of time. For those hypotheses that are not significant, in future research, it is better that they be repeatedly explored over a longer period of time. Thirdly, future research can be undertaken in other countries or cities. This research is limited to Kuala Lumpur, but can be conducted in other cities of Malaysia to provide an overall concept of the purchasing intention of hybrid cars.

4.6 Recommendations

The main aim of green marketing is to motivate consumers to purchase green products. Certain industries have tried to apply green marketing with varying degrees of success. Some companies and industries thought that the greenness of the product itself is enough to sell the product. However, the automobile industry started to apply green marketing in a different way. It tried to develop a marketing strategy to persuade consumers to purchase hybrid cars. This study suggests that the greenness of the hybrid cars is not sufficient to motivate consumers to purchase green products. There should be collaboration among the different factors to persuade consumers to purchase green products. The results of this research indicate that green trust and price sensitivity are the main factors that influence consumers in Malaysia to purchase hybrid cars. In addition, the price factor might be one of the barriers to the purchasing intention of the product. It is important to develop a strategy that meets the consumers demand in a way that increases the sustainability. This strategy has many benefits including revenue generation, and decreasing the cost and development of new products. Companies that use green marketing may have a better image in the minds of consumers. A company's brand will have a better reputation in the future if they have tried to protect the environment.

References

- Adler, J. & Parmryd, I. (2010). Quantifying colocalization by correlation: The Pearson correlation coefficient is superior to the Mander's overlap coefficient. *Cytometry Part A*, 77A(8), 733-742.
<http://dx.doi.org/10.1002/cyto.a.20896>
- Bekk, M., Spörrle, M., Hedjasie, R., & Kerschreiter, R. (2015). Greening the competitive advantage: antecedents and consequences of green brand equity. *Quality & Quantity*, 50(4), 1727-1746.
<http://dx.doi.org/10.1007/s11135-015-0232-y>

- Chahal, H., Dangwal, R., & Raina, S. (2014). Antecedents and consequences of strategic green marketing orientation. *Journal Of Global Responsibility*, 5(2), 338-362. <http://dx.doi.org/10.1108/jgr-09-2013-0012>
- Chen, Y. (2010). The Drivers of Green Brand Equity: Green Brand Image, Green Satisfaction, and Green Trust. *Journal Of Business Ethics*, 93(2), 307-319. <http://dx.doi.org/10.1007/s10551-009-0223-9>
- Chen, Y. & Chang, C. (2012). Enhance green purchase intentions. *Management Decision*, 50(3), 502-520. <http://dx.doi.org/10.1108/00251741211216250>
- Chen, Y. & Chang, C. (2012). Greenwash and Green Trust: The Mediation Effects of Green Consumer Confusion and Green Perceived Risk. *Journal Of Business Ethics*, 114(3), 489-500. <http://dx.doi.org/10.1007/s10551-012-1360-0>
- Chen, Y. & Chang, C. (2013). Towards green trust. *Management Decision*, 51(1), 63-82. <http://dx.doi.org/10.1108/00251741311291319>
- Cronbach, L. & Shavelson, R. (2004). My Current Thoughts on Coefficient Alpha and Successor Procedures. *Educational And Psychological Measurement*, 64(3), 391-418. <http://dx.doi.org/10.1177/0013164404266386>
- De Craecker, F. & De Wulf, L. (2009). Integration of Green Marketing within the Automotive Industry - A case study of four car manufacturers on the Belgian market. *Högskolan I Halmstad Högskolan I Halmstad/Sektionen För Ekonomi Och Teknik (SET)*. <https://goo.gl/5K3MRq>
- Dehghanan, H., & Bakhshandeh, G. (2014). The Impact of Green Perceived Value and Green Perceived Risk on Green Purchase Behavior of Iranian Consumers. *International Journal of Management and Humanity Sciences*, 3(2), 1349-1357. <https://goo.gl/FB98Bg>
- Dief, M. & Font, X. (2010). The determinants of hotels' marketing managers' green marketing behaviour. *Journal Of Sustainable Tourism*, 18(2), 157-174. <http://dx.doi.org/10.1080/09669580903464232>
- Eichholtz, P., Kok, N., & Quigley, J. (2010). Doing Well by Doing Good? Green Office Buildings. *American Economic Review*, 100(5), 2492-2509. <http://dx.doi.org/10.1257/aer.100.5.2492>
- Fraj, E., Martínez, E., & Matute, J. (2013). Green marketing in B2B organisations: an empirical analysis from the natural-resource-based view of the firm. *Journal Of Business & Industrial Marketing*, 28(5), 396-410. <http://dx.doi.org/10.1108/08858621311330245>
- Harvey, C. (2016). 40 percent of adults on Earth have never heard of climate change. *Washington Post*. Retrieved 17 November 2016, from <https://goo.gl/hbyW5K>
- Hosein, N. Z. (2012). Measuring the purchase intention of visitors to the auto show. *Journal of management and marketing research*, 10, 1. <https://goo.gl/uB1z39>
- Huang, Y., Yang, M., & Wang, Y. (2014). Effects of green brand on green purchase intention. *Marketing Intelligence & Planning*, 32(3), 250-268. <http://dx.doi.org/10.1108/mip-10-2012-0105>
- Jaafar, S. N., Lalp, P. E., & Naba, M. M. (2012). Consumers' perceptions, attitudes and purchase intention towards private label food products in Malaysia. *Asian Journal of Business and Management Sciences*, 2(8), 73-90. <https://goo.gl/IjJAo7>
- Karunanayake, R. & Wanninayake, D. (2015). Impact of Key Purchasing Determinants on Purchase Intention of Hybrid Vehicle Brands in Sri Lanka, an Empirical Study. *Journal Of Marketing Management (JMM)*, 3(1), 40-52. <http://dx.doi.org/10.15640/jmm.v3n1a4>
- Kinoti, M. W. (2011). Green marketing intervention strategies and sustainable development: A conceptual paper. *International Journal of Business and Social Science*, 2(23). <https://goo.gl/GEHVgI>
- Kotler, P. (2011). Reinventing Marketing to Manage the Environmental Imperative. *Journal Of Marketing*, 75(4), 132-135. <http://dx.doi.org/10.1509/jmkg.75.4.132>
- Kumar, P. (2015). Green marketing innovations in small Indian firms. *World Journal Of Entrepreneurship, Management And Sustainable Development*, 11(3), 176-190. <http://dx.doi.org/10.1108/wjemsd-01-2015-0003>
- Mazar, N. & Zhong, C. (2010). Do Green Products Make Us Better People?. *Psychological Science*, 21(4), 494-498. <http://dx.doi.org/10.1177/0956797610363538>
- NADAF, Y. & NADAF, S. (2014). GREEN MARKETING: CHALLENGES AND STRATEGIES FOR INDIAN COMPANIES IN 21ST CENTURY. *International Journal Of Research In Business Management*, 2(5), 91-104. <https://goo.gl/Teozrn>
- Oliver, J. & Lee, S. (2010). Hybrid car purchase intentions: a cross-cultural analysis. *Journal Of Consumer Marketing*, 27(2), 96-103. <http://dx.doi.org/10.1108/07363761011027204>

- Ong, H., Mahlia, T., & Masjuki, H. (2012). A review on energy pattern and policy for transportation sector in Malaysia. *Renewable And Sustainable Energy Reviews*, 16(1), 532-542. <http://dx.doi.org/10.1016/j.rser.2011.08.019>
- Pelozo, J. & Shang, J. (2010). How can corporate social responsibility activities create value for stakeholders? A systematic review. *Journal of the Academy of Marketing Science*, 39(1), 117-135. <http://dx.doi.org/10.1007/s11747-010-0213-6>
- Rahbar, E. & Abdul Wahid, N. (2011). Investigation of green marketing tools' effect on consumers' purchase behavior. *Business Strategy Series*, 12(2), 73-83. <http://dx.doi.org/10.1108/17515631111114877>
- Ramayah, T., Lee, J., & Mohamad, O. (2010). Green product purchase intention: Some insights from a developing country. *Resources, Conservation And Recycling*, 54(12), 1419-1427. <http://dx.doi.org/10.1016/j.resconrec.2010.06.007>
- Razak, M., Yusof, A., Mashahadi, F., Alias, Z., & Othman, M. (2014). INTENTION TO PURCHASE HYBRID CARS IN MALAYSIA AN OVERVIEW. *International Journal Of Economics, Commerce And Management*, 2(10), 1-13. <https://goo.gl/JUNp3Q>
- Rehman, Z. U., & Dost, M. K. (2013). Conceptualizing green purchase intention in Emerging markets: An empirical analysis on Pakistan. In *The 2013 WEI International Academic Conference Proceedings*. <https://goo.gl/ytAFuz>
- Roberts, J. (1996). Green consumers in the 1990s: Profile and implications for advertising. *Journal Of Business Research*, 36(3), 217-231. [http://dx.doi.org/10.1016/0148-2963\(95\)00150-6](http://dx.doi.org/10.1016/0148-2963(95)00150-6)
- Rosenbaum, M. & Wong, I. (2015). Green marketing programs as strategic initiatives in hospitality. *Journal Of Services Marketing*, 29(2), 81-92. <http://dx.doi.org/10.1108/jsm-07-2013-0167>
- Sandeen, C. (2009). It's Not Easy Being Green: Green Marketing and Environmental Consumerism in Continuing Higher Education. *Continuing Higher Education Review*, 73, 93-113. <https://goo.gl/HKDicu>
- Vedava, P. (2014). GREEN MARKETING: AN IMPACT OF NON-MARKET ENVIRONMENT. *International Journal Of Applied Services Marketing Perspectives*, 3(3), 1175-1179. <https://goo.gl/QCRtmn>
- Wen, T. & Noor, N. (2015). What Affects Malaysian Consumers' Intention to Purchase Hybrid Car?. *Asian Social Science*, 11(26), 52-63. <https://goo.gl/lp9I5Z>
- Yazdanifard, R. & Mercy, I. (2011). The impact of Green Marketing on Customer satisfaction and Environmental safety. *International Conference On Computer Communication And Management*, 5, 637-641. <https://goo.gl/tbDqx8>
- Yeng, F. & Yazdanifard, R. (2015). Green marketing: A Study of Consumers Buying Behavior in Relation to Green Products. *Global Journal Of Management And Business*, 15(5). <https://goo.gl/YX3GZJ>
- Yusof, J., Singh, G., & Razak, R. (2013). Purchase Intention of Environment-Friendly Automobile. *Procedia - Social And Behavioral Sciences*, 85, 400-410. <http://dx.doi.org/10.1016/j.sbspro.2013.08.369>