

**KEY FACTORS THAT INFLUENCE PURCHASING INTENTION
OF HYBRID VEHICLE IN THAILAND
(BANGKOK AND BOUNDARY AREA)**



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entitled
**KEY FACTORS THAT INFLUENCE PURCHASING INTENTION
OF HYBRID VEHICLE IN THAILAND
(BANGKOK AND BOUNDARY AREA)**

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.....
Asst. Prof. Randall Shannon,
Ph.D.
Advisor

.....
Mr. Teerawat Chokratanapong
Candidate

.....
Asst. Prof. Astrid Kainzbauer,
Ph.D.
Committee member

.....
Assoc. Prof. Vichita Ractham,
Ph.D.
Chairperson

.....
Duangporn Arbhasil,
Ph.D.
Dean, College of Management
Mahidol University

.....
Worapong Janyangyuen,
D.B.A
Committee member

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Teerawat Chokratanapong

KEY FACTORS THAT INFLUENCE PURCHASING INTENTION OF HYBRID VEHICLE IN THAILAND (BANGKOK AND BOUNDARY AREA)

TEERAWAT CHOKRATANAPONG 5849047

M.M. (INNOVATION IN MANAGEMENT)

THEMATIC PAPER ADVISORY COMMITTEE: ASST. PROF. RANDALL SHANNON, Ph.D., ASSOC. PROF. VICHITA RACTHAM, Ph.D., WORAPONG JANYANGYUEN, D.B.A.

ABSTRACT

The purpose of this thematic paper study was to understand the relation between the five factors and purchasing intention of hybrid vehicle (Bangkok and boundary area). The factors were environmental concern, self-image, social norm, price perception and government incentive. The questionnaire was distributed to 105 respondents in order to collect data and conducted analysis.

Through this study, the result showed that only three factors which are environmental concern, self-image and price perception have a positive relation with purchasing intention of hybrid vehicle (Bangkok and boundary area). Recommendations on those mentioned factors were provided in the study.

KEY WORDS: Hybrid Vehicle / Purchasing Intention / Thailand

32 pages

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CHAPTER I

BACKGROUND AND PROBLEM STATEMENTS

1.1 Background

A hybrid vehicle is the type of vehicle that uses more than one means of propulsion such as combination between normal petrol or diesel engine and electric motor. The main advantages of a hybrid technology are less fuel consumption and CO2 emission.

In 1901, Ferdinand Porsche invented the first hybrid vehicle 'the Lohner-Porsche Mixte Hybrid'. However, hybrid vehicle only become widely available in the late 1990s, after the first mass-produced hybrid vehicle *Toyota Prius*, launch in Japan in 1997, and followed by the *Honda Insight*, launch in 1999 in the United States and Japan.

In Thailand, many car makers have launched hybrid model into market such as

- Toyota (Camry hybrid, Prius, Alphard hybrid)
- Nissan (X-trail hybrid)
- Honda (Jazz hybrid, Civic hybrid, Accord hybrid)
- Mercedes-Benz (E300 BLUETEC hybrid)
- Lexus (NH300)
- Porsche (Panamera S hybrid, Cayenne S hybrid)

1.2 Problem statement

Even there are many models of hybrid vehicle from Japanese & European car makers launch in Thailand market. However, the ratio of hybrid vehicle sale volume comparing with conventional vehicle are still considered low. According to the Federation of Thai Industries and SCB Economic Intelligence Center (SCBEIC) information, the

hybrid car vehicle sale volume in 2015 was around 1% of total vehicle sale in Thailand market.

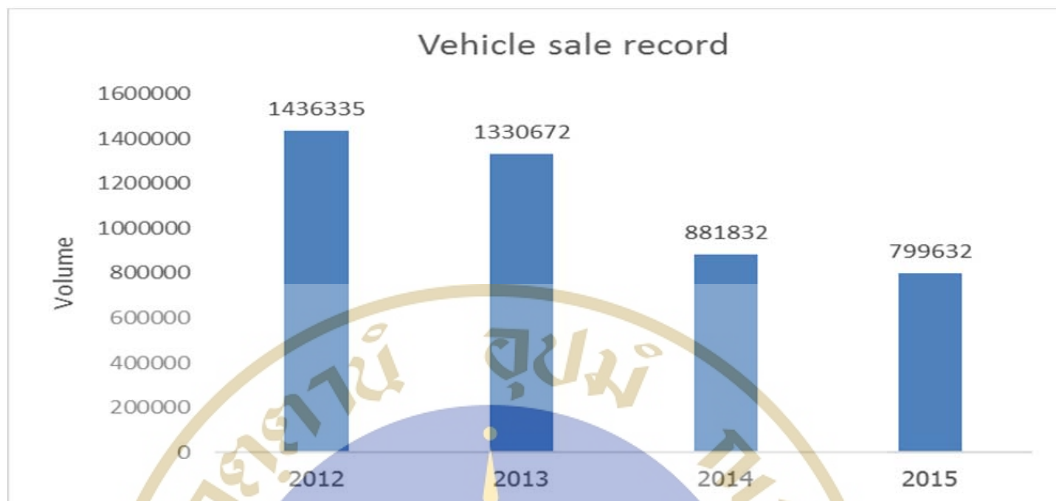


Figure 1.1 Sales volume of vehicle in Thailand

Source: Federation of Thai Industries

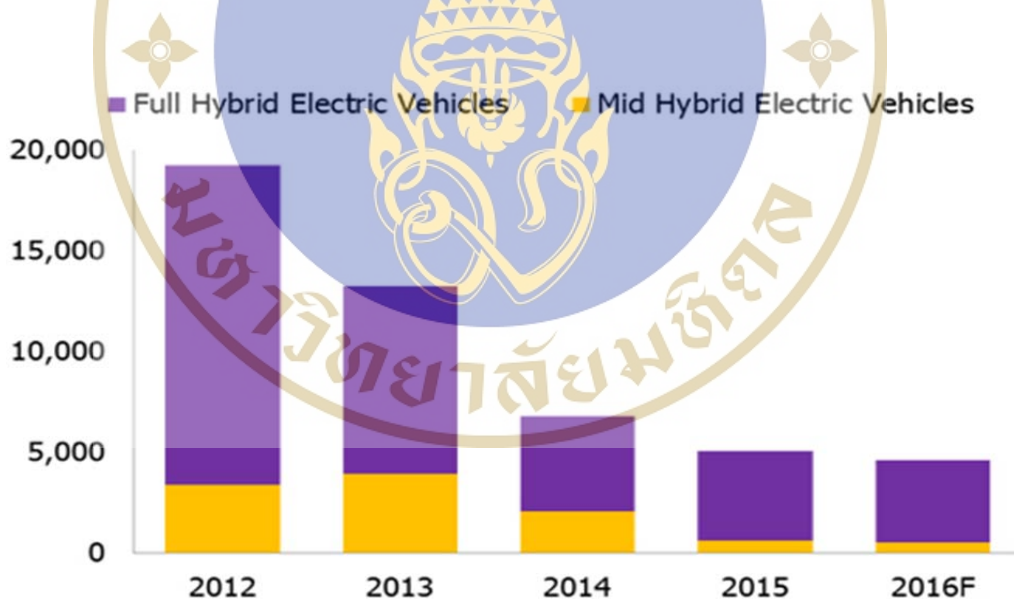


Figure 1.2 Sales volume of hybrid vehicle in Thailand

Source: SCB Economic Intelligence Center

1.3 Objectives

The research objectives of this study are as follows:

- To determine the factors that influence purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area).
- To identify which factors, have a higher influence over their decisions to purchase hybrid vehicle (Bangkok and boundary area).



CHAPTER II

LITERATURE REVIEW

In order to understand consumer behavior about hybrid vehicle, many research has been conducted to explore key factors that influence purchasing intention of hybrid vehicle in several countries.

Therefore, this study will investigate on Thai consumer behavior (Bangkok and boundary area) about key factors that influence their purchasing intention for hybrid vehicle. Moreover, this study will identify which factors have a higher influence power.

2.1 Environmental concern and purchasing intention of hybrid vehicle

Nowadays, many people are concerning about environment issue. Therefore, they prefer to buy more green product. Many research has shown that there is the positive relation between consumer who are concerning about environment issue and their purchasing intention of hybrid vehicle.

Based on Oliver and Lee (2010: 96-103) study about hybrid vehicle purchase intention in USA and Korea, they found that consumer who looking for the green products information are likelier to purchase a hybrid vehicle. Apart from this, the study about customer intention to purchase hybrid vehicle in Malaysia (Jayaraman et al. 2015), also shown that environmental attitude and awareness of responsibility has the positive influence with the purchase intentions of hybrid vehicle. According to Tsen et al. (2006: 40-54) study, there is a strong relation between customers, attitudes and willingness to purchase environmentally friendly products, and attitudes towards the environment were also supported by Irland (1993: 34).

Therefore, this study will explore whether the relation between this factor and Thai consumer behavior (Bangkok and boundary area) is existed or not.

H1: Environment concern has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok area and boundary area)

2.2 Self-image and purchasing intention for hybrid vehicle

Self-image congruence captures how the consumer feels the product relates to their view of who they are and who they would like to be (Sirgy 1982: 287-300). For example, green consumers are willing to pay more for consumer products and services that are consistent with their belief system (Oliver and Lee 2010: 96-103). Their study also found that there is a positive relation existed between Self-Image and purchasing intention in Korea and USA.

This study will check the relation between Self-Image and purchasing intention of hybrid vehicle for Thai consumer whether it is similar to consumer in Korea and USA or not.

H2: Self-image has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area)

2.3 Social norm and purchasing intention for hybrid vehicle

Social norm can be one factor that influence on consumer purchasing intention. According to Deffuant et al. (2005: 1041-69), consumers are often influenced by neighbors, leader and co-worker's opinion. Another research by Taylor & Todd (1995) supported that influence from others are affect consumer willingness to buy technology. In addition, Peer group and family are the most influence people to buy hybrid vehicle in Sri Lanka as founded by Karunanayake and Wanninayake (2015: 40-52).

Therefore, this research will investigate the relation between Social norm and purchasing intention of hybrid vehicle for Thai consumer (Bangkok and boundary area).

H3: Social norm has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area)

2.4 Price perception and purchasing intention for hybrid vehicle

Price is one of the main factor that impact to consumer decision when they are going to buy product. One of the previous study that proved was, if one pays attention

to prices, and uses this information to make purchase decisions, it must be because prices are important (Monroe, 1982)

Based on study by Karunanayake and Wanninayake (2015: 40-52) about impact of key purchasing determinants on purchase Intention of hybrid vehicle brands in Sri Lanka, it shown that price perception strongly impact on the adoption of hybrid vehicle in Sri Lanka. Moreover, most of the people in Sri Lanka also believe that hybrid vehicles are getting lesser second-hand value when compare with conventional vehicle.

This situation also similar to Thailand market, normally the second-hand price of hybrid vehicle is trend to be lower than conventional vehicle which produce in the same year even the first-hand price is higher. Therefore, this research will explore whether the relation between this factor and purchasing intention of Thai consumer is existed or not.

H4: Price perception has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and bound area)

2.5 Government incentive and purchasing intention for hybrid vehicle

Government incentive is possible to be one of the factor that impact on purchasing intention. According to Karunanayake and Wanninayake (2015: 40-52), government incentives are one of the factors that influence the adoption of hybrid vehicle in Sri Lanka and government should continue providing incentives for hybrid vehicle buyers.

In Thailand during 2010-2011, government announce the policy to giving incentive to person who buy first car (with some condition such as vehicle price lower than 1 million baht, engine capacity lower than 1,500 cc for benzene type and do not allow to re-sale or transfer vehicle to other person in the first 5 years). By launching this policy, sale volume of new vehicle in Thailand was increased a lot during that period. Therefore, this factor should be taken into consideration whether it has a relation with purchasing intention of hybrid vehicle or not.

H5: Government incentive has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area)

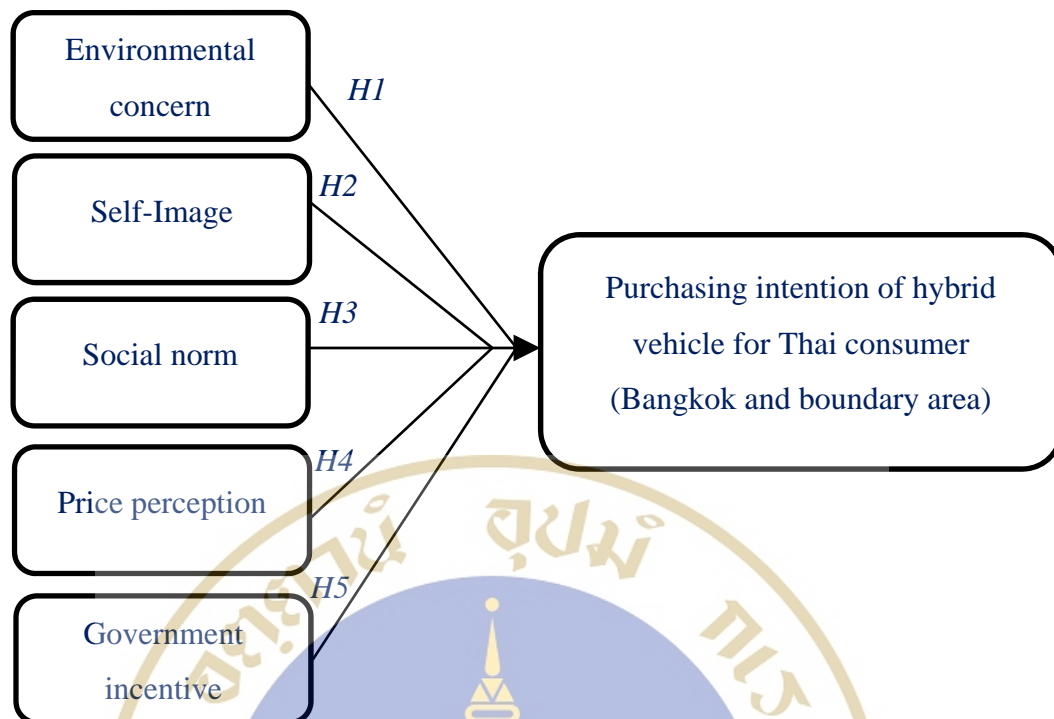


Figure 2.1 Proposed research model

2.6 Hypotheses to be tested:

H1: Environmental concern has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok area and boundary area)

H2: Self-Image has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area)

H3: Social norm has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area)

H4: Price perception has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and bound area)

H5: Government incentive has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area)

CHAPTER III

RESEARCH METHODOLOGY

This study will aim to understand the key factors that influence consumer to purchase hybrid vehicle and identify which factors have a higher influence on their decision. In the study, a quantitative approach will be applied.

A list of hypotheses as mentioned earlier will be tested to identify the key factors that influence on purchasing intention of hybrid vehicle. The hypotheses are as follows:

H1: Environmental concern has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok area and boundary area)

H2: Self-Image has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area)

H3: Social norm has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area)

H4: Price perception has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and bound area)

H5: Government incentive has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area)

3.1 Instrument development

By using technique of quantitative research, questionnaire will be developed in order to identify relevancy of each hypothesis. According to Kendall (2008), questionnaires can target large population of target sample size and, provide or obtain evidence of patterns which can be analyzed to acquire outstanding results. It is also very affordable and less time consuming as it is online survey.

3.2 Data collection method

The completed questionnaire will be distributed through online channel such as Facebook and line application. However, because of time constrain, this study will focus on people who located in Bangkok and boundary area only, and the sample size will be at least 100 people from various of background (age, gender, hybrid car owner status).

The respondent will be asked to rate the level of agreement (Level 1 Strongly agree, Level 2: Agree, Level 3: not agree and Level 4: Strongly not agree) in following questions to understand their opinion clearly.

Topic 1: Environmental concern and purchasing intention of hybrid vehicle.

- I interest in reading consumer reports about green product.
- I understand the environmental impact caused by product that I use.
- Environmental concern influences me to buy hybrid vehicle

Topic 2: Self-Image and purchasing intention for hybrid vehicle.

- Having a positive self-Image is very important to me.
- Using a hybrid vehicle would say something positive about who I am
- Using a hybrid vehicle would have a positive effect on my self-image

Topic 3: Social norm and purchasing intention for hybrid vehicle.

- I listen to people who are important to me when buy product
- I must get approval from people who are important to me when buy a

hybrid vehicle.

Topic 4: Price perception and purchasing intention for hybrid vehicle.

- The product price is very important to me
- I will buy hybrid vehicle if price is not expensive.
- I will buy hybrid vehicle if second hand price (resale to market) is higher

than conventional vehicle.

- I will buy hybrid vehicle if the maintenance cost is lower than conventional vehicle.
- I will buy hybrid vehicle if fuel price is high.

Topic 5: Government incentive and purchasing intention for hybrid vehicle

- I will buy hybrid vehicle if government give incentive (money, tax reduction) to support me.

- I won't buy hybrid vehicle if government give incentive to support oil price.

Topic 6: Purchasing/Repurchasing intention for hybrid vehicle

- I would like to buy a hybrid vehicle for my next car

Apart from above questions, the respondent will be asked to provide general information about demographic to understand that target group of this study.

- Location of respondent
- Hybrid car owner status
- Gender
- Age
- Income

3.3 Data analysis

Based on the answer that receive from respondents through questionnaire, analysis will be done to explore the relevancy of hypotheses, understand the key factors that influence purchasing intention for hybrid vehicle and which factor has the highest influence power. Then conclusion and recommendation will be given.

CHAPTER IV

DATA COLLECTION AND ANALYSIS

After collected data through online survey, all answer from 105 respondents will be analyzed by using SPSS to find the answer for research objective.

Table 4.1 Respondents' profile

General information		Count	Column N %
Living place	Bangkok or boundary area	105	100%
	Other	0	0%
Status	Hybrid vehicle owner	17	16.19%
	Non-hybrid vehicle owner	88	83.81%
Gender	Male	54	51.43%
	Female	51	48.57%
Age	Below 22 years	3	2.86%
	22 - 30 years	55	52.38%
	31 - 40 years	39	37.14%
	41 - 50 years	8	7.62%
	51 - 58 years	0	0%
	Over 58 years	0	0%
Income	Below or equal to 15,000 baht	5	4.76%
	15,001 - 30,000 baht	16	15.24%
	30,001 - 50,000 baht	34	32.38%
	50,001 – 70,000 baht	30	28.57%
	70,000 – 100,000 baht	12	11.43%
	100,001 baht or more	8	7.62%

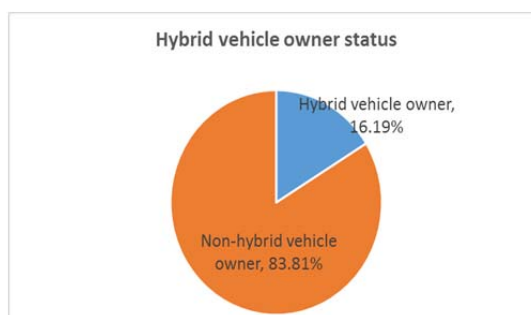


Figure 4.1 Hybrid vehicle owner status

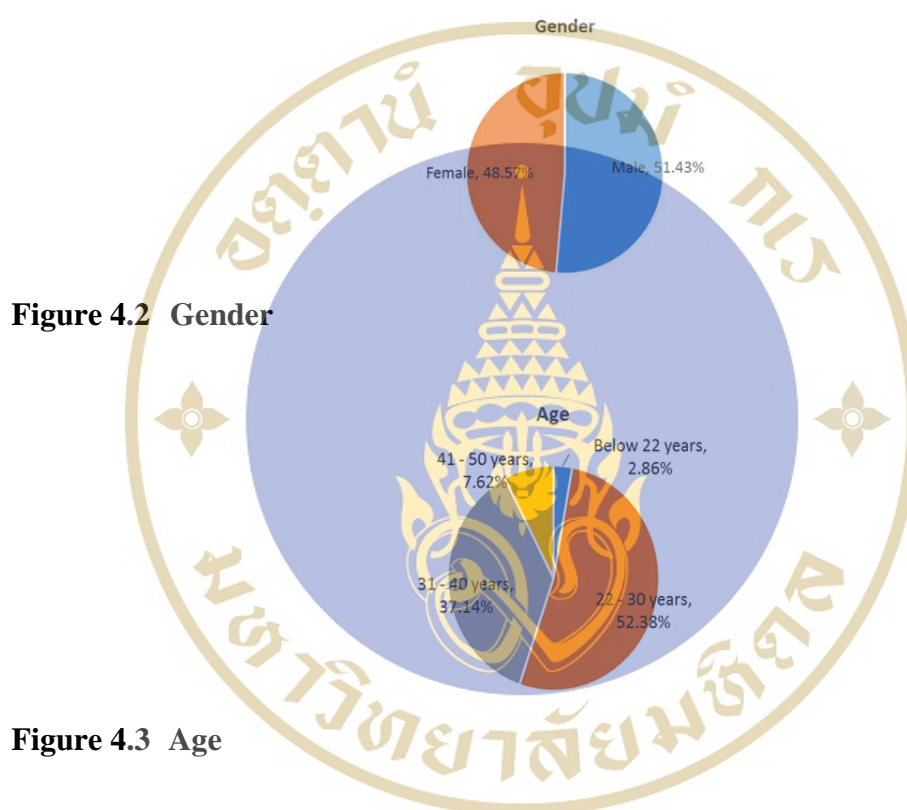


Figure 4.2 Gender

Figure 4.3 Age

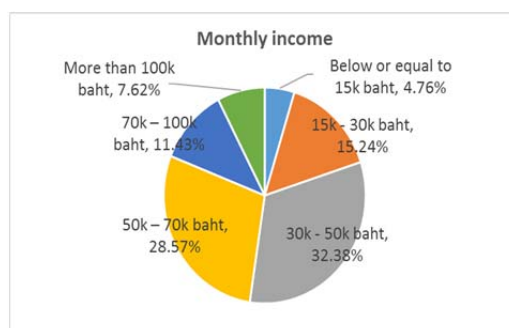


Figure 4.4 Monthly income

For overview of respondent's profile, all respondents are living in Bangkok or boundary area which is the target group of this study. Majority of respondents are the non-hybrid vehicle owner, 83% (Figure 4.1). For gender of respondents, half of them is male and another half is female (Figure 4.2). In term of age, majority of the respondents are 22 - 40 years old, 90%. More than 41 years old is around 7% and below 22 years old is around 3% (Figure 4.3). For monthly income, 30,001 – 50,000 baht is the biggest group (32%), follow by 50,001 - 70,000 baht (28%), 15,001 – 30,000 baht (15%), 70,001 – 100,000 baht (11%), over or equal 100,000 baht (8%) and the smallest group is below or equal 15,000 baht (5%) (Figure 4.4).

Table 4.2 Environmental concern factor

Environmental concern	Count	Column N %
1) I interest in reading consumer reports about green product		
<input type="checkbox"/> Strongly agree	17	16.19%
<input type="checkbox"/> Agree	59	56.19%
<input type="checkbox"/> Disagree	26	24.76%
<input type="checkbox"/> Strongly disagree	3	2.86%
2) I understand the environmental impact caused by product that I use		
<input type="checkbox"/> Strongly agree	16	15.24%
<input type="checkbox"/> Agree	73	69.52%
<input type="checkbox"/> Disagree	16	15.24%
<input type="checkbox"/> Strongly disagree	0	0.00%
3) Environmental concern influences me to buy hybrid vehicle		
<input type="checkbox"/> Strongly agree	10	9.52%
<input type="checkbox"/> Agree	36	34.29%
<input type="checkbox"/> Disagree	41	39.05%
<input type="checkbox"/> Strongly disagree	18	17.14%

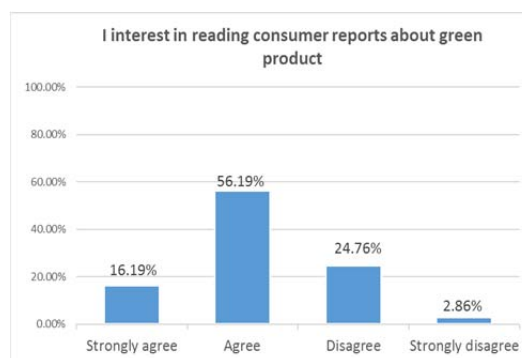


Figure 4.5 I interest in reading consumer reports about green product

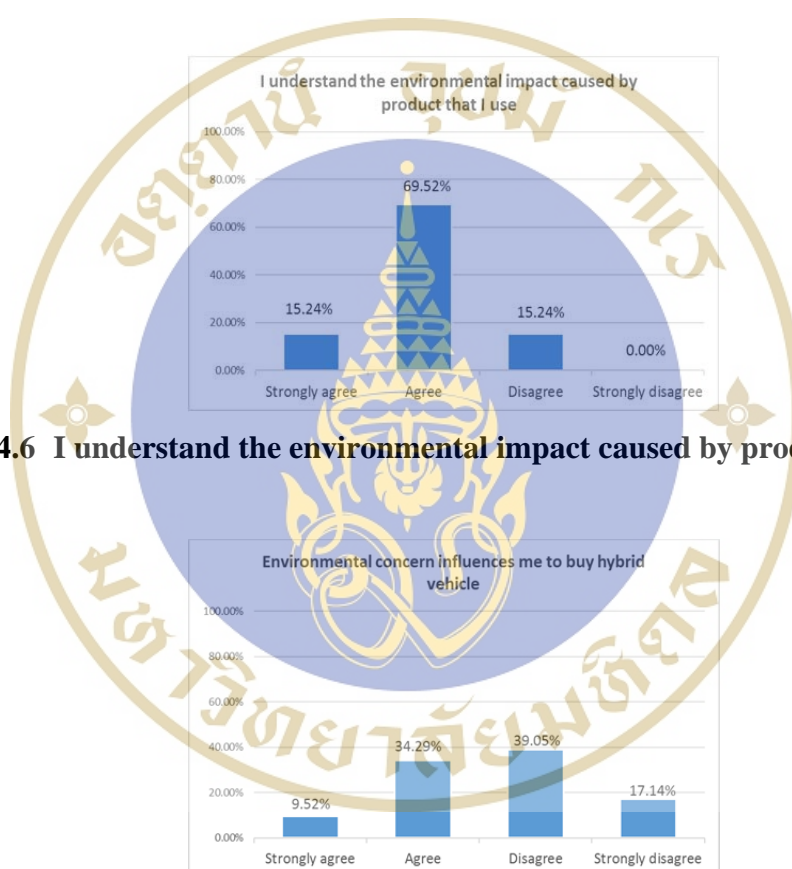


Figure 4.6 I understand the environmental impact caused by product that I use

Figure 4.7 Environmental concern influences me to buy hybrid vehicle

Table 4.2 is summary of respondent's answer about Environmental concern factor. Basically, respondents will be asked to rate agreement level on 3 sentences.

First sentence is '*I interest in reading consumer report about green product*' (Figure 4.5). Around 72% (86 people) of them agree/strongly agree on this, while remaining is the groups of people that dis agree/strongly dis agree, 28% (29 people).

Second sentence is 'I understand the environmental impact caused by product that I use' (Figure 4.6). Majority of the group, 85% (89 people), agree/strongly agree on this and 15% (16 people) disagree on it. However, there is no respondent who strongly disagree on this sentence.

The last sentence is 'Environmental concern influences me to buy hybrid vehicle' (Figure 4.7). Majority answer turn to disagree/strongly disagree which is around 56% (59 people), and remaining 44% (46 people) has the same opinion as mentioned sentence.

Table 4.3 Self-Image factor

Self-Image	Count	Column N %
1) Having a positive Self-Image is very important to me		
<input type="checkbox"/> Strongly agree	17	16.19%
<input type="checkbox"/> Agree	71	67.62%
<input type="checkbox"/> Disagree	16	15.24%
<input type="checkbox"/> Strongly disagree	1	0.95%
2) Using a hybrid vehicle would say something positive about who I am		
<input type="checkbox"/> Strongly agree	7	6.67%
<input type="checkbox"/> Agree	51	48.57%
<input type="checkbox"/> Disagree	43	40.95%
<input type="checkbox"/> Strongly disagree	4	3.81%
3) Using a hybrid vehicle would have a positive effect on my self-image		
<input type="checkbox"/> Strongly agree	8	7.62%
<input type="checkbox"/> Agree	52	49.52%
<input type="checkbox"/> Disagree	40	38.10%
<input type="checkbox"/> Strongly disagree	5	4.76%

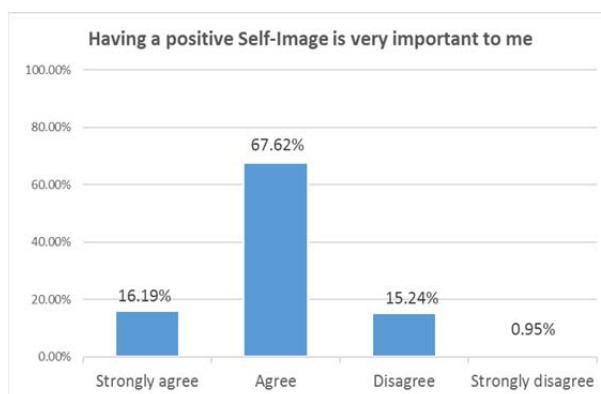


Figure 4.8 Having a positive Self-Image is very important to me

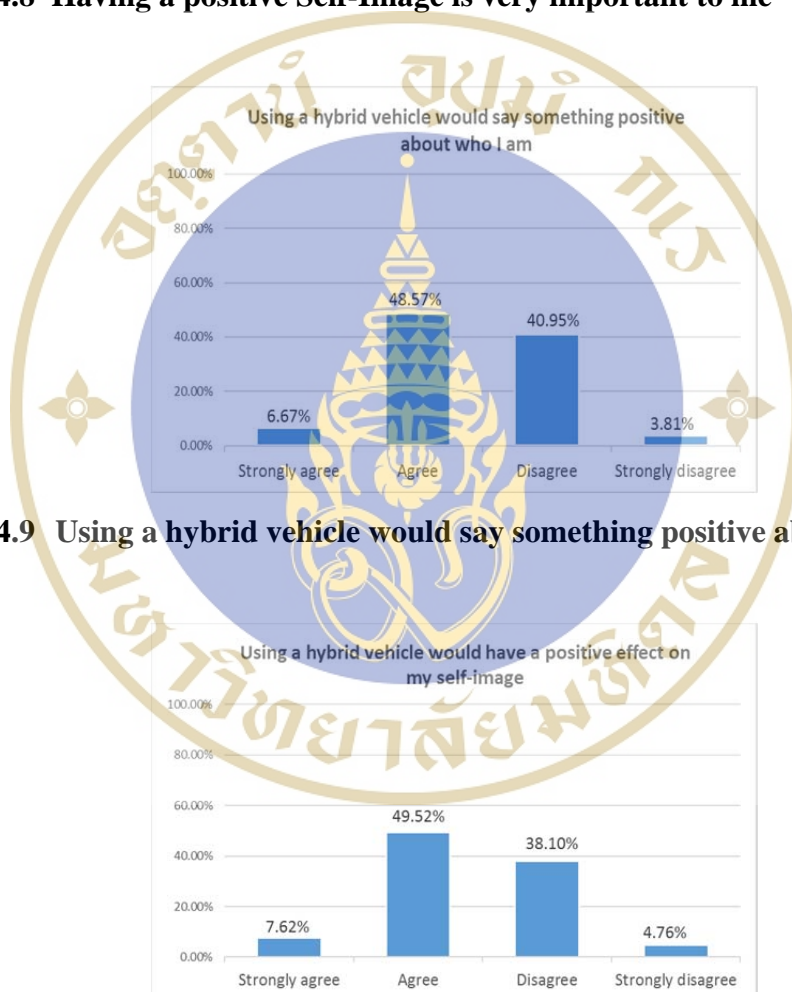


Figure 4.9 Using a hybrid vehicle would say something positive about who I am

Figure 4.10 Using a hybrid vehicle would have a positive effect on my self-image

Table 4.3 is the result of respondent's feedback about self-image factor. First sentence is 'Having a positive self-image is very important to me' (Figure 4.8). Most of respondents thinking are same as this sentence, agree: 16% (17 people) and strongly agree: 68% (71 people), while small number disagrees on it, 16% (17 people).

Second sentence is 'Using a hybrid vehicle would say something positive about who I am' (Figure 4.9). The number of people who are agree/strongly agree on this sentence is higher than number of people who disagree/strongly disagree on it, 55% (58 people) and 45% (47 people).

Another sentence is 'Using a hybrid vehicle would have a positive effect on my self-image' (Figure 4.10). The trend of the answer is quite same with previous sentence, 57% (60 people) agreed/strongly agreed while 43% (45 people) disagreed/strongly disagreed.

Table 4.4 Social norm factor

Social norm	Count	Column N %
1) I listen to people who are important to me when buy product		
<input type="checkbox"/> Strongly agree	36	34.29%
<input type="checkbox"/> Agree	55	52.38%
<input type="checkbox"/> Disagree	13	12.38%
<input type="checkbox"/> Strongly disagree	1	0.95%
2) I must get approval from people who are important to me when buy a hybrid vehicle		
<input type="checkbox"/> Strongly agree	24	22.86%
<input type="checkbox"/> Agree	40	38.10%
<input type="checkbox"/> Disagree	34	32.38%
<input type="checkbox"/> Strongly disagree	7	6.67%

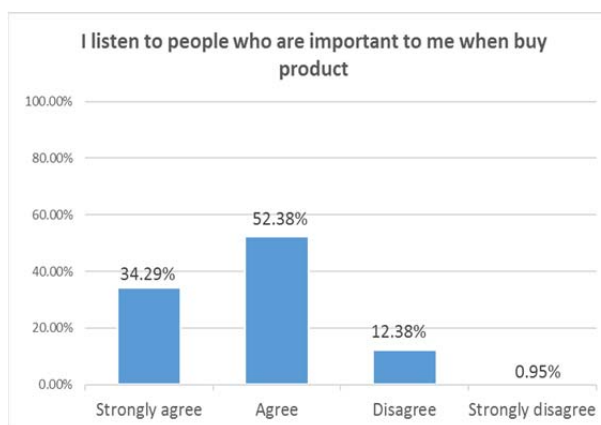


Figure 4.11 I listen to people who are important to me when buy product

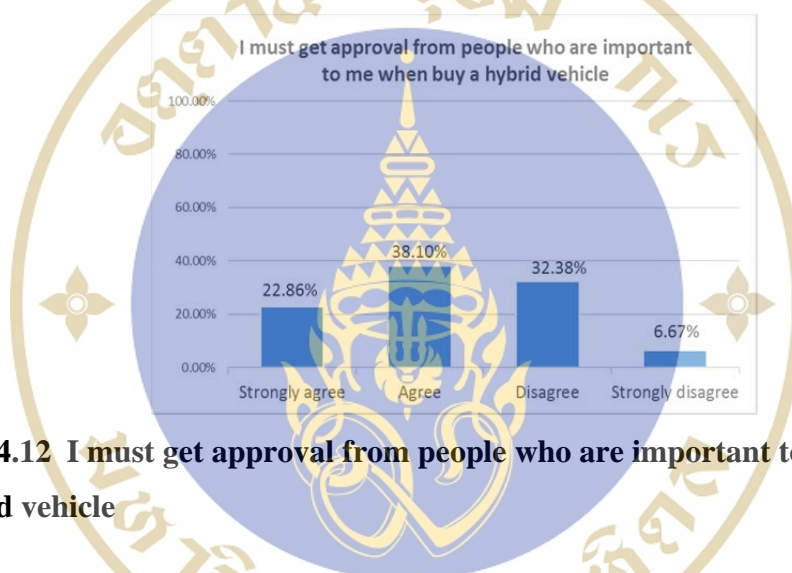


Figure 4.12 I must get approval from people who are important to me when buy a hybrid vehicle

Table 4.4 is the information related to Social norm factor, researcher start with the first sentence '*I listen to people who are important to me when buy product*' (Figure 4.11). Based on the answer, researcher found that most of the respondents agree/strongly agree on it, 86% (91 people), only a few people which is around 13% (14 people) disagree/strongly disagree on this sentence.

Then, second sentence is '*I must get approval from people who are important to me when buy a hybrid vehicle*' (Figure 4.12). Around 67% (64 people) of the answer is agreed/strongly agreed, and 39% (41 people) disagreed/disagreed.

Table 4.5 Price perception factor

Price perception	Count	Column N %
1) The product price is very important to me <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree	49 52 4 0	46.67% 49.52% 3.81% 0.00%
2) I will buy hybrid vehicle if price is not expensive <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree	40 57 7 1	38.10% 54.29% 6.67% 0.95%
3) I will buy hybrid vehicle if 2nd hand price (resale to market) is higher than conventional vehicle <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree	15 57 27 5	14.42% 54.81% 25.96% 4.81%
4) I will buy hybrid vehicle if the maintenance cost is lower than conventional vehicle <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree	28 63 14 0	26.67% 60.00% 13.33% 0.00%
5) I will buy hybrid vehicle if fuel price is high <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree	17 55 31 2	16.19% 52.38% 29.52% 1.90%



Figure 4.13 The product price is very important to me

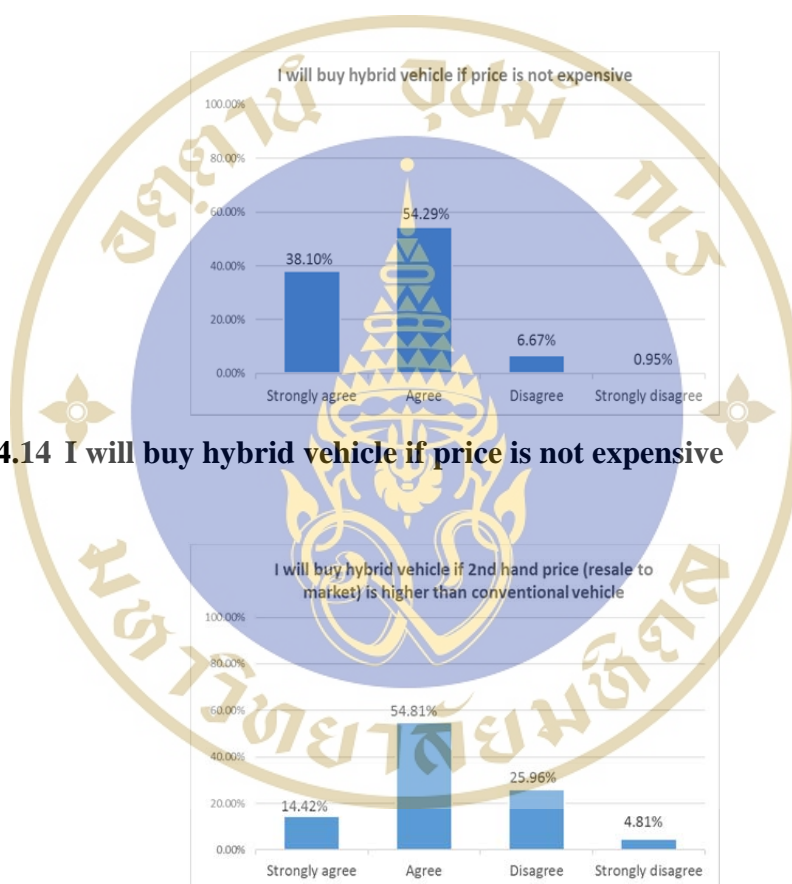


Figure 4.14 I will buy hybrid vehicle if price is not expensive

Figure 4.15 I will buy hybrid vehicle if 2nd hand price (resale to market) is higher than conventional vehicle

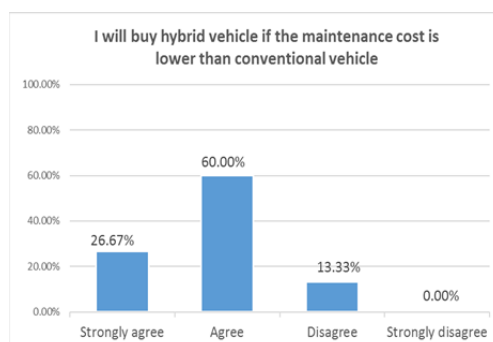


Figure 4.16 I will buy hybrid vehicle if the maintenance cost is lower than conventional vehicle

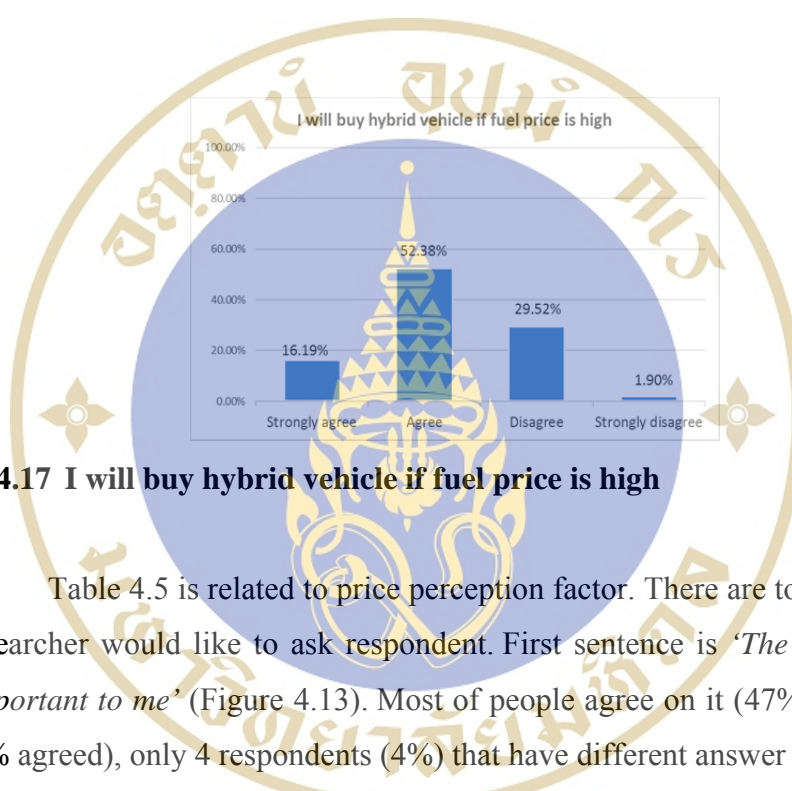


Figure 4.17 I will buy hybrid vehicle if fuel price is high

Table 4.5 is related to price perception factor. There are totally 5 sentences that researcher would like to ask respondent. First sentence is ‘*The product price is very important to me*’ (Figure 4.13). Most of people agree on it (47% strongly agreed and 49% agreed), only 4 respondents (4%) that have different answer from other.

Next sentence is ‘*I will buy hybrid vehicle if price is not expensive*’ (Figure 4.14). Most of people also agree/strongly agree on this sentence too, 38% (40 people) strongly agreed and 54% (57 people) agreed. However, there are some people that thinking in different way, 8% (8 people) disagreed/strongly disagreed.

Third sentence is ‘*I will buy hybrid vehicle if second hand price when resale to market is higher than conventional vehicle*’ (Figure 4.15). Around 69% of respondents (72 people) agree/strongly agree on this sentence. 31% (32 people) disagree/strongly disagree on mentioned sentence.

Forth sentence is ‘*I will buy hybrid vehicle if the maintenance cost is lower than conventional vehicle*’ (Figure 4.16). Many respondents are agreed/strongly agreed

as well, 87% (91 people). However, some people also have different opinion and choose disagree when answer the questionnaire, 13% (14 people).

The last sentence under this factor is '*I will buy hybrid vehicle if fuel price is high*' (Figure 4.17). 68% (72 people) are agreed/strongly agreed while 32% (33 people) are disagreed/strongly disagreed.

Table 4.6 Government incentive factor

Government incentive	Count	Column N %
1) I will buy hybrid vehicle if government give incentive (money, tax reduction) to support me		
<input type="checkbox"/> Strongly agree	43	40.95%
<input type="checkbox"/> Agree	53	50.48%
<input type="checkbox"/> Disagree	9	8.57%
<input type="checkbox"/> Strongly disagree	0	0.00%
2) I won't buy hybrid vehicle if government give incentive to support oil price		
<input type="checkbox"/> Strongly agree	8	7.62%
<input type="checkbox"/> Agree	46	43.81%
<input type="checkbox"/> Disagree	45	42.86%
<input type="checkbox"/> Strongly disagree	6	5.71%

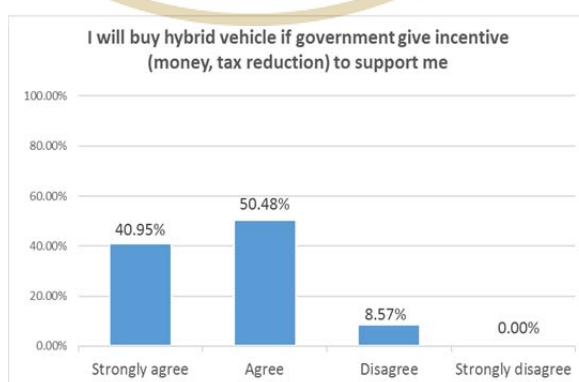


Figure 4.18 I will buy hybrid vehicle if government give incentive (money, tax reduction) to support me

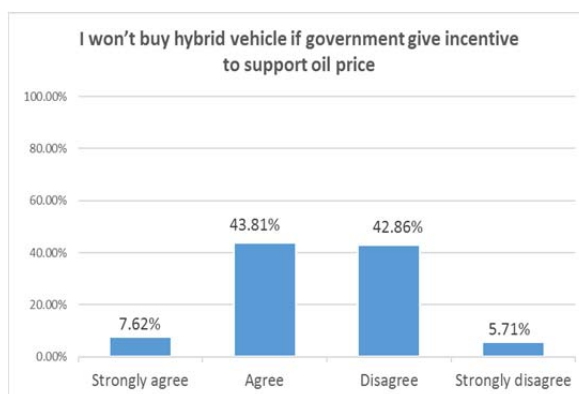


Figure 4.19 I won't buy hybrid vehicle if government give incentive to support oil price

Table 4.6 is related to government incentive factor. There are 2 sentences that researcher would like to ask respondent. First sentence is 'I will buy hybrid vehicle if government give incentive (money, tax reduction) to support me' (Figure 4.18). Most of respondents agree (50%, 53 people)/strongly agree (40%, 43 people) with this sentence, only 9% of respondents (9 people) that disagree on this sentence and no one choose strongly disagree.

Second sentence is 'I won't buy hybrid vehicle if government give incentive to support oil price' (Figure 4.19). Half of them agree/strongly agree (51%, 54 people) on this sentence while another half disagree/strongly disagree (49%, 51 people) on it.

Table 4.7 Purchasing intention

Purchasing intention	Count	Column N %
1) I would like to buy a hybrid vehicle for my next car		
<input type="checkbox"/> Strongly agree	8	7.62%
<input type="checkbox"/> Agree	46	43.81%
<input type="checkbox"/> Disagree	47	44.76%
<input type="checkbox"/> Strongly disagree	4	3.81%

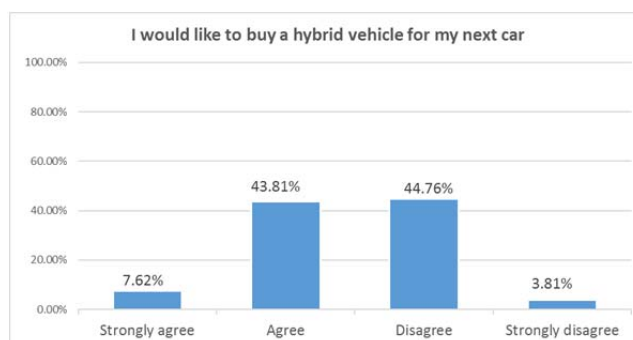


Figure 4.20 I would like to buy a hybrid vehicle for my next car

For Table 4.7 & Figure 4.20, researcher would like to know purchasing intention on hybrid vehicle. Therefore, respondents have been asked by sentence ‘I would like to buy a hybrid vehicle for my next car’. 54 people are agreed (7%) / strongly agreed (44%) while 51 people are disagreed (45%) / strongly disagreed (4%).

Table 4.8 Regression result (5 factors)

Variables Entered/Removed ^b			
Model	Variables Entered	Variables Removed	Method
1	Government_Incentive, Social_Norm, Environmental_Concern, Price_Perception, Self_Image ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: 8.1) I would like to buy a hybrid vehicle for my next car

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.696 ^a	.485	.459	.51092

a. Predictors: (Constant), Government_Incentive, Social_Norm, Environmental_Concern, Price_Perception, Self_Image

Table 4.8 Regression result (5 factors) (cont.)

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.072	5	4.814	18.443	.000 ^a
	Residual	25.582	98	.261		
	Total	49.654	103			

a. Predictors: (Constant), Government_Incentive, Social_Norm, Environmental_Concern, Price_Perception, Self_Image

b. Dependent Variable: 8.1) I would like to buy a hybrid vehicle for my next car

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.030	.315		-.095	.925
	Environmental_Concern	.443	.092	.389	4.796	.000
	Self_Image	.469	.108	.384	4.340	.000
	Social_Norm	.040	.083	.038	.485	.629
	Price_Perception	.404	.137	.258	2.942	.004
	Government_Incentive	-.212	.116	-.165	-1.829	.070

a. Dependent Variable: 8.1) I would like to buy a hybrid vehicle for my next car

For result in model summary table, researcher found that the adjusted R square is 0.459 which mean that these variables can explain the relation of purchasing intention of hybrid vehicle 45.9%. For remaining 54.1%, it is come from other factors.

For result in ANOVA table, researcher found that the values under 'Sig' column is 0.000. Meaning that the model has significance with purchasing intention of hybrid vehicle.

Then, researcher analyses the relation between each variable and purchasing intention of hybrid vehicle. The value under 'Sig' column of environmental concern, self-image and price perception variables are lower than 0.05, and the value under 'B' is positive. Meaning that these variables have positive relation with purchasing intention of hybrid vehicle. For social norm and government incentive variables, the value under 'Sig' column is higher than 0.05. Meaning that these variables don't have relation with purchasing intention of hybrid vehicle.

Moreover, the information in table under 'standard coefficients (Beta)' shown that environmental concern has the highest value (0.389). Meaning that this variable

has the strongest correlation with purchasing intention of hybrid vehicle. The second rank is self-image (0.384) and the third rank is price perception (0.258).

Table 4.9 Regression result (3 factors)

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Price_Perception, Self_Image, Environmental_Concern ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: 8.1) I would like to buy a hybrid vehicle for my next car

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.682 ^a	.465	.449	.51526

a. Predictors: (Constant), Price_Perception, Self_Image, Environmental_Concern

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.105	3	7.702	29.009	.000 ^a
	Residual	26.549	100	.265		
	Total	49.654	103			

a. Predictors: (Constant), Price_Perception, Self_Image, Environmental_Concern

b. Dependent Variable: 8.1) I would like to buy a hybrid vehicle for my next car

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.062	.299		-.207	.837
	Environmental_Concern	.443	.093	.389	4.765	.000
	Self_Image	.438	.098	.358	4.465	.000
	Price_Perception	.268	.117	.171	2.289	.024

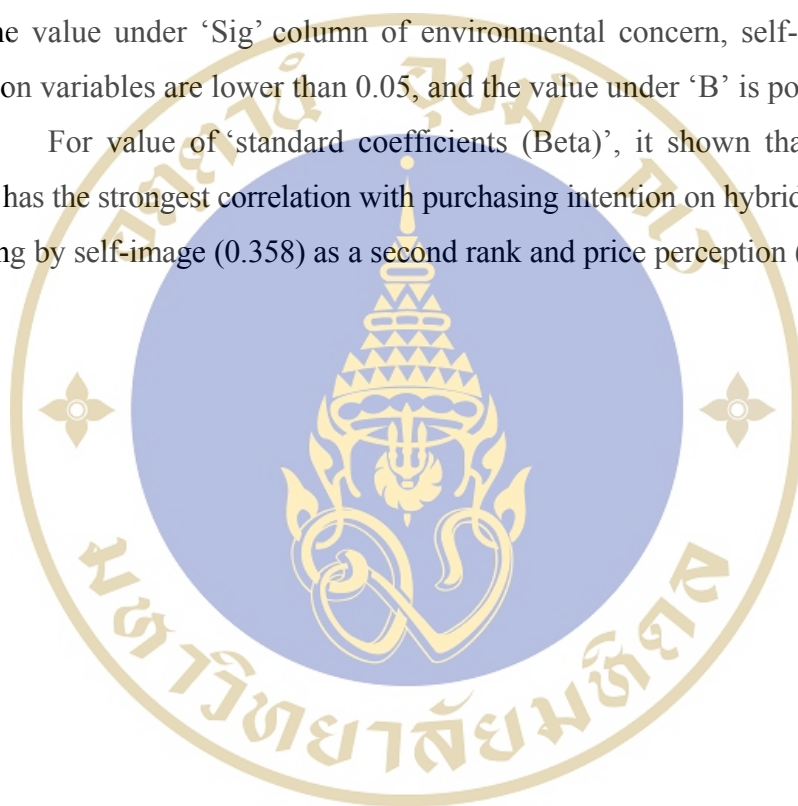
a. Dependent Variable: 8.1) I would like to buy a hybrid vehicle for my next car

After found that only 3 factors which are environmental concern, self-image and price perception have positive relation with purchasing intention on hybrid vehicle, researcher run regression again by choosing only those factors. Then, researcher found that the result is shown in the same trend.

For result in model summary table, researcher found that the adjusted R square is 0.449 which mean that these 3 variables can explain the relation of purchasing intention of hybrid vehicle 44.9%. For remaining 55.1%, it is come from other factors.

For ANOVA table, the value under 'Sig' column is 0.000. For coefficients table, the value under 'Sig' column of environmental concern, self-image and price perception variables are lower than 0.05, and the value under 'B' is positive.

For value of 'standard coefficients (Beta)', it shown that environmental concern has the strongest correlation with purchasing intention on hybrid vehicle (0.389). Following by self-image (0.358) as a second rank and price perception (0.171) as a third rank.



CHAPTER V

SUMMARY AND CONCLUSION

5.1 Research Questions and Findings

By conducting surveys through questionnaire and analyzing answers, researcher found that some variables have positive relation on purchasing intention of hybrid vehicle (people who located in Bangkok and boundary area), but some are not.

Table 5.1 Summary result

Item	Detail	Accepted/Rejected	Significant
Hypothesis 1	Environmental concern has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok area and boundary area)	Accepted	0.000
Hypothesis 2	Self-Image has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area)	Accepted	0.000
Hypothesis 3	Social norm has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area)	Rejected	0.629
Hypothesis 4	Price perception has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and bound area)	Accepted	0.004
Hypothesis 5	Government incentive has a positive influence on purchasing intention of hybrid vehicle in Thailand (Bangkok and boundary area)	Rejected	0.070

The result from the research show that hypothesis 1 (environmental concern factor), hypothesis 2 (self-image factor) and hypothesis 3 (price perception factor) are accepted which mean there are a positive relation between variables and purchasing intention of hybrid vehicle (people who located in Bangkok and boundary area).

However, hypothesis 3 (social norm factor) and hypothesis 5 (government incentive factor) are rejected which mean there are no relation between variables and purchasing intention of hybrid vehicle (people who located in Bangkok and boundary area).

Apart from this, the result from study also shown that environmental concern has the strongest correlation on purchasing intention of hybrid vehicle (Bangkok and boundary area). Meaning that this factor has the highest influence on purchasing intention of hybrid vehicle. The second rank is self-image and the third rank is price perception.

5.2 Recommendation

To increase sale volume of hybrid vehicle for Bangkok and boundary area, researcher would suggest car maker to focus more on 3 strategies. Firstly, as we found that 'Environment concern' is the variable that has a strongest relation with purchasing intention to buy hybrid vehicle. Therefore, researcher recommend car maker to focus more on customer who are concerning about environmental by provide special promotion or event to them. For example, buy hybrid vehicle and have a chance to join trip/activity related to environment such as plantation trip.

Secondary, promoting or advertising more to let customer have a mindset that using hybrid vehicle will have a good self-image. Car maker may hire some actor or actress who have a good image to be presenter of hybrid car model.

For the price perception, the result show that it has a relation with purchasing intention to buy hybrid vehicle also even it less than above 2 variables. Therefore, car maker may give promotion in term of vehicle price reduction or discount for maintenance cost to further increase sale volume after conduct some activity relates to variable 1&2.

Apart from these variables, we also found that social norm and government incentive variables do not have a relation with purchasing intention to buy hybrid vehicle. So, researcher recommend car maker to focus less on those variables. This is to reduce unnecessary job for car maker and can have more resources to conduct other activity that possible to increase sale volume. For example, many car makers may try to negotiate with government to launch policy for supporting hybrid vehicle. So, it may cause unnecessary workload and cost to car maker.

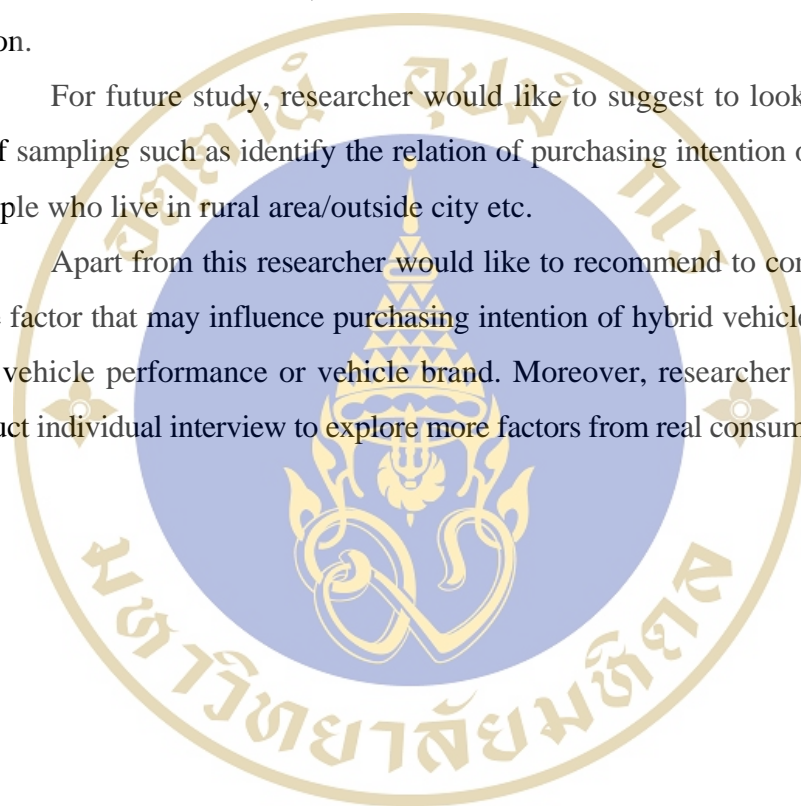
5.3 Limitation and future research

There are some limitations on this study. First is time constraint, if there is more time, researcher could expand the scope by doing survey with the people who live in other big city apart from Bangkok and boundary area. Moreover, questionnaire can be distributed to a bigger group to collect more information and get more accurate result.

Another limitation is internet access of respondents. Researcher only distribute questionnaire via online channel, so the answer from non-internet user may be possible limitation.

For future study, researcher would like to suggest to looking into another group of sampling such as identify the relation of purchasing intention on hybrid vehicle and people who live in rural area/outside city etc.

Apart from this researcher would like to recommend to considering another possible factor that may influence purchasing intention of hybrid vehicle such as vehicle design, vehicle performance or vehicle brand. Moreover, researcher also recommend to conduct individual interview to explore more factors from real consumer point of view.



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