THE ATTITUDES OF PEOPLE AND THE INFLUENCING FACTORS ON INTENTION TO PURCHASE GREEN PRODUCTS IN THAILAND

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ABSTRACT

The purpose of this study is to identify the environmental attitudes of Thai people, and what are the key factors affecting intention to purchase a green product, including what is the characteristic of Thai people who have the intention to purchase green products the most. In this study determine the sample criteria into 2 groups of respondent which are people who used to buy green products and people who never bought the green product before to improve understanding about the environmental attitude, behavior, and perceived risk of Thai people to elaborate marketing strategies for the companies.

The result showed that people who used to buy green products realize and concern about environmental problems include having a positive attitude toward green products more than people who never bought the green products before. In addition, the result showed that environmental attitude and positive perceived risk affect intention to purchase green products in a positive way, while negative perceived risk affects intention to purchase green product in a negative way. By Thai people who have intention to purchase green products the most is female who married and live with family.

KEY WORDS: Green Products/ Environment

55 pages

CONTENTS

CONTENTS (cont.)

LIST OF FIGURES

LIST OF TABLES

CHAPTER I
INTRODUCTION

In the present, there are many environmental problems happening in the world such as Acid rain, Water pollution, Air pollution, Ozone layer depletion, and Global warming. Some of the problems are small and affect a few ecosystems, but some of them are drastically impacting the environment and their effect can ruin the landscape (Rinkesh, 2019). People are in a situation of terrestrial emergency with severe environmental problems that piling up high around them. Unless they think and concern the various issues seriously, disaster will be a nightmare that closer to their life than they can imagine.

According to environmental problems happen very often in the last few years, it made people more concern about how to save and protect the world from the trouble than the past, they change and avoid some behavior that can create a negative effect on the environment, such as stop using the straw, using cloth bags instead of plastic bags, and using only eco-friendly products. However not only people that care and concern about the environmental problems but also the business field, there are so many companies that aware of the environmental problems and want to be a part to help protect the world, they produce a new product line that has less environmental impacts than the traditional product, as we can call a green product or eco-friendly product, the example of the green products are clothes made from recycled fabric, reusable coffee cups, and eco-friendly dishwashing. Another example of a green product that is on-trend is a green building. Green building is the operation of buildings with consideration on energy use, water use, indoor environmental quality, and material section. The report showed that in United States, green building can create US$106.32 billion in 2012 and will reach to US$234.77 billion by 2019, meanwhile, the demand of green building in the Asia Pacific include many regions tend to increase as well (Lehmann, 2015).

The attention for green products has grown in recent years, as indicated by increased the demand of consumer and increased supply by companies (Durif, Roy, & Boivin, 2012). Nevertheless in the past not every company that sold the green product

would be successful. Pickett, Kangun, & Grove (1993) stated that although customers concerned about the environment, it did not always lead to their actions, the number of sales of green product was still not high due to people prefer to buy new products to green products.

However in 2015, Blueshift Research and SurveyMonkey found that consumers are more opening their mind and more spending money for eco-friendly products than the past, they found that 5% of consumers will choose to buy a hybrid or electric vehicle, and more than 50% of consumers oppose GMO foods, and 1 in 3 consumers prefer eco-friendly options. In addition, one of the interesting trends is growing of customer's environmental conscience, in their research asked respondents to choose between the product that is better for the environment and another which is cheaper, 35% of respondents are willing to spend more money on the product that is better for the environment and 56% were at least moderately or slightly likely. Therefore it can indicate that most of the respondents accept to pay more for green products. Information from this research showed that the customer behavior toward eco-friendly product in the past and in the present is not the same, the time changes, it made people are more open mind for green product and change their attitude toward green products to be more positive. (Rudy, 2015).

In the same way, Lehmann (2015) who studied about the global trend of green market stated that the demand on green products is growing fast, especially, products that help consumers benefit the environment through reducing water use, reducing energy use, reducing waste, or generating their own power. For example, IKEA, a furniture retailer, has reported that the demand for green products of their store increased by 58 % in 2014.

Furthermore, Lehmann (2015) surveyed the trend of the green market in 3 countries which are Germany, United States, and China, the report showed that In Germany, the sales volume of green products increased by 27% from 2011 to 2012. Similarly, in United States, the growth rates for green business products are rising faster than conventional goods, including the country in Asia, the survey showed that 47% of Chinese people aware more about the green household product.

1.1 Research Objective

This study has a purpose to focus on the environmental attitudes of Thai people, what are the key factors affecting intention to purchase a green product, and what is the characteristic of Thai people who have the intention to purchase green products the most to improve understanding about the environmental attitude, behavior, and perceived risk of Thai people to elaborate marketing strategies for the companies.

1.2 Research Question

1.2.1 How the difference in environmental attitudes between people who used to buy green products and people who have never bought the green product before?

Hypothesis 1: There is a significant difference between people who used to buy green products and people who have never bought a green product before in their environmental attitude.

1.2.2 What are the key factors affecting the intention to purchase the green product?

Hypothesis 2.1 There is a significant effect between environmental attitude and intention to purchase the green product.

Hypothesis 2.2 There is a significant effect between environmental behavior and intention to purchase the green product.

Hypothesis 2.3 There is a significant effect between perceived risk and intention to purchase the green product.

1.2.3 What is the characteristic of Thai people who have the intention to purchase the green product the most?

1.3 Expected Outcome

The result of this study will help practitioners and companies understand more about customer behavior and their attitude that can lead to creating good strategies, creating the strong reliability for the company, improving organization image,

improving environmental quality, expanding consumer market, and standing out from the competition.

1.4 Scope of the Study

This study focus on Thai people who used to buy green products and Thai people who have never bought the green product before. The samples need to currently live in Thailand. This research will take time around 2 weeks to collect the data via online only.

CHAPTER II
LITERATURE REVIEW

2.1 Green Product

In the present, green consumption can see from the widespread change of consumer behavior for reducing the products that have a negative effect on the environment. A green product is the products which have a positive impact on the environment or alternatively decrease the negative impact on the environment (Cherian & Jacob, 2012). Meanwhile, Speer (2011) indicated that a green product is the goods which have a less environmental impact and no danger to the health of human. A green product is a production of raising concerns about global warming, increasing pollution levels, decreasing natural resource, and the overflowing of wastes (Maichum, Parichatnon, & Peng, 2016). Customers change environmental concerns into their strong commitment to purchase and use green products.

The green product consists of 3Rs that are Reduce, Reuse, and Recycle and have 5 distinct characteristics, first, energy efficiency, second, do not have an impact to ozone, no chemicals, and toxic compounds include not be a cause to create pollution, third, most of them made of recycled materials or from renewable and sustainable sources, forth, using the resource from local manufacturers and the last one is easily reused (Speer, 2011).

Nowadays many companies interest in green issues and launch new products in term of green version such as eco-dishwashing, recycled paper, eco laptop, LED bulbs, and reusable shopping bags, in addition so many brands try to do green marketing, for the example, Starbucks, they attempt to engage their community in sustainable issues by using green materials for producing, packaging. As a part of the "Green Store" initiative, Starbucks also determines to reduce waste, use less water and use less power during production processes (Vos, 2019).

Therefore, from the past research, this study will define the meaning of green product is the environmentally friendly products that safe to the consumer's health, and help to reduce environmental problems by reusing or recycling.

2.2 Environmental Attitude

The attitude has different meaning depending on which field that identify. Ajzen (2005) defined an attitude is a feeling like or dislike a person, place, institution, or event. Attitude focuses on the attention in explanations of human behavior, for the example, attitude toward the church, toward smoking, and toward a hot of social issues such as nuclear power, conservation, and protection of the environment. Similarly, Stedman (2002) explained the meaning of attitude is the perspective that driving behavior and also has the impact to determine the direction of action, for the example, negative attitudes can lead to decrease a possibility of intending to continue participation.

Schultz, Zelezny, & Dalrymple (2000) stated that environmental attitude is the perspective of environmental concern rooted in a person's consciousness and the level which an individual apperceive themselves to be a critical part of the natural environment. More than that environmental attitude can reflect the intention to purchase the green products based on the consumers' attitude towards environmental issues and problems as a significant predictor.

Even though a lot of theories defined that an individual's attitude help to predict the behaviors, but still have some researchers disagree with this conclusion because they found unconnected relationship between behavior and attitudes, for the example, people who are into recycling might not be into carpooling, thus it showed that behind the attitude has a lot of factors that relevant.

So in this research will define the environmental attitude is the perspective of Thai people toward environmental problems that are affected by an individual's environmental concern and can directly impact toward intention to purchase green products. In the questionnaire of this part will separate and measure into 3 topics, the first researcher will test attitude and the environmental concern of Thai people toward environmental problems in general perspective such as asking them "Do you think that

the environmental problem is the most important issues facing society today". Second, will focus more on individual's attitude and feeling about the environmental concern toward environmental problems by asking them more deeply detail about their personal feeling such as "When you think of the ways industries are causing pollution, Did you get frustrated and angry" and the last topics will test them about the attitude toward green product to measure covering of environmental attitude.

2.3 Environmental Behavior

Stern (2000) indicated that environmental behavior means the action and the intention to benefit the environment. People who have environmental concern will try to protect the environment in different ways through their behavior such as recycling, checking and making sure that the package of product they will buy is friendly toward environment, or purchasing only eco-friendly products (Suchard & Polonski, 1991).

However, some researches found that not everyone who has behavior to save the environment will spend more money for purchasing a green product, for the example, people who recycle the paper may not be the same with consumers who purchase the recycled handwriting paper (Pickett, Kangun, & Grove, 1993).

Although the relationship between behavior and purchasing green product still not clear, Laroche, Bergeron, & Barbaro-Forleo (2001) found the information which can support that consumers who aware about environmental problems will spend more money for purchasing green products. Due to 80% of respondents of his study indicated that they will not buy products from companies which create pollution, do not follow environmental regulations and play on the green movement to increase sales. For example, Wal-Mart was dramatically criticized because it produced a paper towels product that made of unrecycled paper and using plastic-packaged but putting a green label on the brand. On the other hand, the company who concern about environmental issues will have a good image and receive good feedback from customers such as affording of McDonald to eliminate polystyrene clamshell packaging and got a compliment as a good example of corporate environmental practices.

Thus, the researcher defines the meaning of environmental behavior in this study that is the action which people who aware and concern about the environmental

issue take to protect the environment and might affect to intention to purchase green products. In the questionnaire, researcher will test that the respondents have done the environmental behavior to help protect and save the environment before or not by giving the example of actions to ask and require them to answer how often they do, such as using a cloth bag instead of a plastic bag to measure their environmental behavior.

2.4 Perceived risk

Perceived Risk is the uncertainty of the customer when they purchase the product. Wang, Wiegerinck, Krikke, & Zhang (2013) defined perceived risk as a combination of uncertainty or seriousness of outcome and the expectation of losses associated with purchase and acts as a barrier toward a purchase behavior. The study of Featherman & Pavlou (2003) confirmed that risk perception has a direct effect on consumers purchase intention in a negative way, similar with Forsythe & Shi (2003) found that risk perception has negative effects on both purchase attitude and purchase intention.

While, Durif, Roy, & Boivin (2012) studied about "perceived risks and green product consumption" and found that consumers tend to perceive negative risks based on green products attributes, especially the functional risk (ineffectiveness and the need to work harder to achieve results), financial risk (getting less for their money) and temporal risk (limited discretionary time, longer utilization time, and longer purchase time). In contrast, perceived risks seemed positive when it comes to physical risk (the absence of long term risks to the body and human health) and psychosocial risk (concerning about products that using recyclable materials had a positive impact on purchaser, generating feelings be a part of preserving environmental problems, following a trend, and giving the appearance of being a good person due to responsibility toward environment).

However, the fact that the psychosocial risk is positive can be explained by Griskevicius, Tybur, & Van den Bergh (2010) showed that green products are an important status-enhancing reputational benefit. People derive enhanced self-image from purchasing green products.

Therefore, in this study, researcher defines the perceived risk is the barrier that have occurred or have potential to occur and impact to intention to purchase the green product in negative or positive way by mainly emphasizes on 5 types of risks which are functional risk, financial risk, physical risk, psychosocial risk, and time risk in the same meaning as previous research above. In the questionnaire will test the respondents in 5 types of risk which are a functional risk, financial risk, physical risk, psychosocial risk, and time risk. For the example of question is “Do you think the price of a green product is expensive” to test and measure the financial risk of respondents.

2.5 Green Purchase Intention and Behavior

Intentions are controlled by the influencing factors that motivate and affect to the behavior. The intention also can identify how difficult people are willing to try, or how much an attempt of people are planning for performing the action. Ajzen (1991) stated that the more intention engages in certain behavior, the more an actual behavior would be performed.

Ramayah, Lee, & Mohamad (2010) identified the intention to purchase a green product as a decision to have green purchase behavior that is purchasing a green product in a certain way, Similarly, Rashid, Jusoff, & Kassim (2009) defined green purchase intention as the determination of each person that prefer green products to conventional products in his or her purchase considerations. Green purchase intention can affect to the green purchase behavior due to green purchase behavior means purchasing and consuming products which have less impacts on the environment (Mainieri, Barnett, Valdero, Unipan, & Oskamp, 1997).

Meanwhile, D’Souza, Taghian, & Lamb (2005) suggested that the attitude is the best predictor of intention to purchase green products, similarly, Laroche, Bergeron, & Barbaro-Forleo (2001) that support this information due to they found the result that a positive attitude toward green products have a potential to affect the purchase behavior as well.

Therefore, this research identifies the intention to buy green products as a determination which is affected by environmental attitude, behavior, and perceived risk factors and reaching to the decision making and behavior to purchase green products. In

the questionnaire will test and measure how much respondents interest in purchasing the green product by asking the purchase intention questions, for the example, Will you start to purchase a green product within the next month, to test and measure how much they have the intention to purchase green products.

From all of the information after reviewed the past research, the researcher will measure 4 keys factors to answer each of the research questions.

Table 2.1 Dimension with Measurement items

Dimensions	Measurement Items	References
Environmental Attitude	The perspective in general toward environmental problems	(Schultz, Zelezny, & Dalrymple, 2000)
	The individual or personal perspective toward environmental problems	
	The attitude toward the green product	
Environmental Behavior	The action which helps protect and save the environment	(Suchard & Polonski, 1991)
	Stopping the action which harm and danger for the environment	
Perceived Risk	Functional risk (quality of the green product)	(Durif, Roy, & Boivin, 2012)
	Financial risk (cost of the green product)	
	Physical risk (safety of the green product to the user health)	
	Psychosocial risk (the image when using the green product)	
	Time risk (lifetime of the green product)	
Intention to Purchase Green Products	Interesting to purchase the green product	(Rashid, Jusoff, & Kassim, 2009)
	Recommending other people to buy the green product	
	Switching from a regular product to a green product	
	Using only the green product	

CHAPTER III
RESEARCH METHODOLOGY

3.1 Conceptual Framework

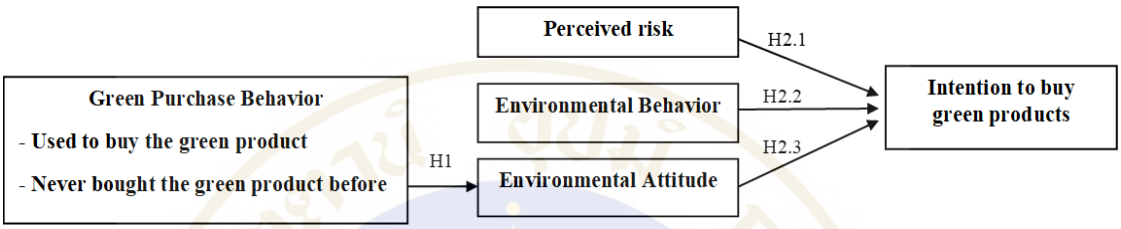

Fig. 3.1 Conceptual Framework

In this study adopted a conceptual framework on Targeting consumers who are willing to pay more for environmentally friendly products by Laroche, Bergeron, & Barbaro-Forleo (2001). However, their framework did not include perceived risk toward green products but the purpose of this study want to focus on environmental attitude and influential factors toward intention to purchase green products, therefore their framework was modified by adding perceived risk as a new variable to see the barrier of purchasing and removing the demographics, values, and knowledge variable from the framework in order to this group of variables is suitable for using analyze the targeting consumer more than analyzing the factors that influent people to buy the green product.

Laroche, Bergeron, & Barbaro-Forleo (2001) found that environmental attitude is the important key factors toward intention to buy green products. Meanwhile, Suchard & Polonski (1991) defined that consumer who concerns about the environmental problem will tend to protect the environment through their behavior in different ways such as purchasing eco-friendly products, so from this information shows that attitude and behavior of people toward intention to buy green product are affected by concerning and awareness of the environmental issue. Nevertheless, perceived risks can be a barrier toward purchasing green products, Durif, Roy, & Boivin (2012) identified 5 perceived risks that can create a negative or positive effect to the intention

to purchase a green product which is the functional, financial, temporal, physical and psychosocial risk.

This research interest to compare and study about how different attitude of people who used to buy green products and people who never bought the green product before, identify what are the factors affecting the intention to purchase green product and what is the characteristic of Thai people who have intention to purchase green products the most to help the company identify and create marketing strategies that arise from an improved understanding of attitude and consumer behavior.

3.2 Data Collection and Sampling

To study and find explanations of results, a questionnaire survey was designed based on the quantitative approach. Orzan, Cruceru, Bălăceanu, & Chivu (2018) stated that people who concern about environmental problems tend to purchase and use eco-friendly products. In contrast, the study of Laroche, Bergeron, & Barbaro-Forleo (2001) found the result in a different way, they stated that not everyone who concerns about environmental problems will purchase green products. So researcher selects 2 different groups of respondents, first is people who used to buy green products, the product that friendly toward environment such as can reuse, reduce the pollution or recycling and second is people who never bought the green product before, although they used to use green products, they will not be counted in the group of people who used to buy because researcher focus on the purchase behavior as a main point to compare, and analyze the different attitude between people who used to buy green products and people who have never bought a green product before, include identifying what are the characteristic of people who will be a main customer of green product and what are the factors affecting intention to buy the green product.

The questionnaire was created in the form of the online version in the Google form and shared via Facebook fan pages such as Enviroman and Green reviews page that have member more than 10,000 people to request them participate in the survey. Most of the past researches about intention to buy green products collected questionnaires more than 200 samples for finding the best answer of research questions, for the example, A Study of Consumers' Willingness to Pay for Green Products

Research collected 215 questionnaires from respondents, therefore in this study decides to collect at least 200 questionnaires from participants to find the best answer of the research questions.

3.3 Data Analysis

The first part of the questionnaire will ask the respondents about the purchase behavior of a green product by separating respondents into 2 groups that are people who used to buy green products and people who never bought a green product before.

Second part of the questionnaire will test about environmental attitude, perceived risk, and intention to buy green products, this part will provide the five Likert scales from 1 (strongly disagree) to 5 (strongly agree) to ask respondents to choose the scale that matches with their opinion the most and for the environmental behavior topic will provide the five frequency scales from 1 (never) to 5 (very often) as well to see the frequency of their behavior. Likert scale is the measuring attitudes by asking people to respond a topic and which they level that they agree with questions to show the cognitive and affective components of attitudes (Mcleod, 2008). The last part of the questionnaire was on respondent's demographic profile such as gender, marital status, household, age, monthly personal income, and education, for all of the questions are the multiple choices.

A good tool to help discover the answer for the research questions is the important thing, in this case, the Statistical Package for the Social Sciences (SPSS) is a productive tool to use. Due to SPSS can analyze the data from questionnaires and produce statistical analysis (Ms & Jamie, 2014). The SPSS program can run many different kinds of tests depend on the result that the researcher wants to find.

Research question 1, researcher will test that environmental attitudes between people who used to buy green products and people who never bought the green product before are similar or different, so running the T-Test will help to analyze and identify the difference (Sig. <.05) between 2 groups of respondents. Research question 2 is testing what are the factors affecting intention to purchase the green product for this question need to run the Regression Analysis to see the cause-effect (Sig. <.05 and Beta

that positive or negative) of environmental attitude, perceived risk, and environmental behavior on the intention to buy green products. Research question 3, the researcher will identify what characteristic of Thai people that have the intention to buy the green product the most, in this question need to run ANOVA Analysis to see that which demographic have intention to buy green products the most.

3.4 Reliability and Validity

Sapsford (2006) stated that reliability in a survey is the stability of the measures. In this research, researcher use Cornbrash's alpha in SPSS to calculate the reliability by the accepted value should exceed 0.60 moreover, to improve the reliability of the test, the researcher does the pilot study with 3 samples and revised the questionnaire such as question-wording to be more clear. For the high content validity, the researcher reviewed the past researches in the area of e-commerce and social commerce include piloted it with 5 people and asked them to check that the scale items were appropriate or unambiguous.

CHAPTER IV
RESEARCH RESULT

A total of 387 responses were received. Some of the questionnaires were dropped as they were incomplete. The total valid respondents 386 usable responses, there are 273 (70.7%) persons who used to buy green products and 113 (29.3%) persons who never bought the green product before. The research used a total of 386 usable responses to analyze and answer each of the research questions and prove the hypothesis.

Research Question1 is how the difference in environmental attitudes between people who used to buy green products and people who never bought a green product before? Based on the literature reviews, Researcher identified the hypothesis for the research question1 is there is a significant difference between people who used to buy green products and people who never bought a green product before in their environmental attitudes. Researcher separated the respondents into 2 groups that are people who used to buy green products and people who never bought the green product before and do the T-Test Analysis to compare their environmental attitude. The result shows that the environmental attitude between people who used to buy green products and people who never bought the green product before are different (Sig. < 0.05).

Table 4.1 Group Statistics of Environmental Attitude

	Purchaser	N	Mean	Std. Deviation	Std. Error Mean
I agree with reducing plastic bag campaign	used to buy	273	4.72	.558	.034
	never bought	113	4.21	.619	.058
The environment is the most important issue facing society today	used to buy	273	4.63	.593	.036
	never bought	113	4.09	.620	.058
I feel bad with products from companies accused of being polluters	used to buy	273	4.12	.836	.051
	never bought	113	2.91	.739	.069
I feel that using plastic knives, forks, or spoons affect to the environment	used to buy	273	4.31	.875	.053
	never bought	113	3.36	.708	.067
I think a green product is a good idea	used to buy	273	4.74	.529	.032
	never bought	113	4.08	.553	.052
When I think of the way industries are causing pollution, I get frustrated and angry	used to buy	273	3.84	.894	.054
	never bought	113	2.50	.757	.071
It is acceptable to pay 10 percent more for a product that is produced, processed, and packaged in an environmentally friendly way	used to buy	273	4.07	.911	.055
	never bought	113	1.67	1.039	.098

Table 4.2 Independent Samples Test of Environmental Attitude

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
I agree with reducing plastic bag campaign	Equal variances assumed	4.010	.046	7.893	384	.000	.509	.065	.382	.636
	Equal variances not assumed			7.564	191.275	.000	.509	.067	.376	.642
The environment is the most important issue today	Equal variances assumed	5.709	.017	8.054	384	.000	.542	.067	.409	.674
	Equal variances not assumed			7.904	200.869	.000	.542	.069	.406	.677
I feel bad with products from companies accused of being polluters	Equal variances assumed	8.574	.004	13.322	384	.000	1.206	.091	1.028	1.384
	Equal variances not assumed			14.025	235.121	.000	1.206	.086	1.036	1.375
I feel that using plastic knives, forks, or spoons affect to the environment	Equal variances assumed	8.792	.003	10.182	384	.000	.945	.093	.762	1.127
	Equal variances not assumed			11.106	256.196	.000	.945	.085	.777	1.112
I think a green product is a good idea	Equal variances assumed	.929	.336	11.073	384	.000	.664	.060	.546	.782
	Equal variances not assumed			10.867	200.878	.000	.664	.061	.543	.784
When I think of the way industries are causing pollution, I get frustrated and angry	Equal variances assumed	2.871	.091	13.886	384	.000	1.331	.096	1.142	1.519
	Equal variances not assumed			14.872	244.998	.000	1.331	.089	1.154	1.507
It is acceptable to pay 10 percent more for a eco-friendly product	Equal variances assumed	3.217	.074	22.557	384	.000	2.397	.106	2.188	2.606
	Equal variances not assumed			21.362	186.824	.000	2.397	.112	2.176	2.618

In the environmental attitude factor, people who used to buy green products are more concern about environmental problems than people who never bought the green product before. As I mention in chapter 2, the literature review of this research will focus on 3 environmental attitudes. First is the environmental attitude in general perspective, second is the personal feeling toward the environmental problems, and the last one is the attitude toward the green product. The result as shown in Table 4.1 there

shows that people who used to buy green products concern in the environmental problems more than people who have bought the green product before (Sig. = 0.00) by in general perspective, they are aware that the environmental problem is the most important issues facing society today (mean 4.63 > 4.09), aware that using plastic knives, forks, or spoons affect to the environment (mean 4.31 > 3.36) and agree with reducing plastic bag campaign (mean 4.72 > 4.21) as shown in Table 4.2. In the personal attitude, they agree that they will feel bad with products from companies accused of being polluters (mean 4.12 > 2.91), get frustrated and angry with the ways industries are causing pollution (mean 3.84 > 2.50), and accept to pay 10 percent more for a product that is produced, processed, and packaged in an environmentally friendly way (mean 4.07 > 1.67) and the last one is the attitude toward green products, respondents agree that a green product is a good idea (mean 4.74 > 4.08) as shown in Table 4.2.

Therefore, all of the information can answer the research question1 and prove the hypothesis1 that there is a significant difference between people who used to buy green products and people who never bought the green product before in their environmental attitude by people who used to buy green products more likely realize and concern about environmental problems, and have a positive perspective toward green products more than people who never bought the green product before.

Research question2 is what are the key factors affecting the intention to purchase the green product? The researcher defined the hypothesis2 after reviewed the past research is there is a significant effect between Perceived risk (H2.1), Environmental behavior (H2.2), and Environmental attitude (H2.3) of Thai people toward Intention to purchase the green product. Therefore, the researcher run the Factor Analysis for grouping the new factors by containing only proper items together in the same factor, and the new factors will be used to analyze in the next step of Regression Analysis.

After running the Factor Analysis, there are three new factors that were formed as shown in Table 4.3, first is Environmental attitude, the attitude toward environmental problem by containing the item of I agree with reducing plastic bag campaign, The environment is the most important issues facing society today, I feel that using plastic knives, forks or spoons affect to the environment, and I think a green

product is a good idea. Second is Negative perceived risk, the risk that will be a barrier toward intention to purchase green products by containing the item of I think green products have a short lifetime (Time risk), I think the price of a green product is expensive (Financial risk), and I afraid that buying a green product is not a good investment (Functional risk). Third is Positive perceived risk, the risk that will motivate people to have intention to purchase green products by containing the item of I think that the green product will be safer for my health than a regular product (physical risk), and I afraid that if I do not use green product people will think that I don't have a responsibility toward the environment (psychosocial risk).

Table 4.3 Rotated Component Matrix[a]

		Component		
		1	2	3
Environmental Attitude	I agree with reducing plastic bag campaign	.782		
	The environment is the most important issue facing society today	.782		
	I feel that using plastic knives, forks, or spoons affect to the environment	.775		
	I think a green product is a good idea	.758		
Negative Perceived Risk	I think green products have a short lifetime		.829	
	I think the price of a green product is expensive		.793	
	I afraid that buying a green product is not a good investment		.768	
Positive Perceived Risk	I think the green product will be safer for my health than a regular product			.861
	I afraid that if I do not use a green product people will think that I do not have a responsibility toward the environment			.838

In order to make sure that all of the new factors (Environmental attitude, Negative perceived risk, and Positive perceived risk) from the Factor Analysis are reliable, the researcher needs to do the reliability to test and use only reliable one to run Regression Analysis in the next steps. The result showed that Cornbrash's alpha of environmental attitude is 0.788, Cornbrash's alpha of negative perceived risk is 0.754, and Cornbrash's alpha of positive perceived risk is 0.663, so it showed that all of the new factors are acceptable due to Achour (2017) stated that Cornbrash's alpha more than 0.6 can accept and be reliable.

A researcher brought the three factors to do Regression Analysis for finding the answer that which factors have an influence on intention to purchase green products.

In this research, the three factors from Factor Analysis will be analyzed by setting Intention to purchase green products factor (Cornbrash's alpha = .943) as a dependent variable and setting environmental attitude, negative perceived risk, and positive perceived risk factor as independent variables.

Regression Analysis result can be described as the cause and effect of the factors as the ANOVA table shows Sig. value at .000. Adjusted R-Square is .616, Adjusted R-Square is another important value that gives the best estimate of the degree of relationship in the basic population. Adjusted R-squared has the value from 0 to 100%, normally the larger the Adjusted R-Squared, the better the Regression model fits with your survey (Frost, 2019). For this research, the independent variables can explain the dependent variable at 61.6% (Adjusted R Square = .616) as shown in Table 4.4.

Table 4.4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.787[a]	.619	.616	.55048

According to the Coefficients[a] table as shown in Table 4.5, there're two factors that have a positive influence on intention to purchase green products which are environmental attitude, and positive perceived risk by environmental attitude has the strongest positively influence on the intention to purchase green products as its standardized Coefficients Beta is high at .465 (Sig. = .000) which means that the concern about the environmental problem of people has the potential to motivate and affect toward intention to purchase green products. The same as the positive perceived risk that has positive influence on the intention to purchase green products as well by its standardized Coefficients Beta is high at .269 (Sig. = .000) which means that the concern about positive perceived risk such as psychosocial risk and physical risk is effect to the intention to purchase green products. However, the result shows that the negative perceived risk such as price and lifetime of green products have a negative effect toward intention to purchase the green product by its Standardized Coefficients Beta is high at -.415 (Sig. = .000) as shown in Table 4.5.

Table 4.5 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.137	.315		3.604	.000
	Environmental Attitude	.738	.056	.465	13.191	.000
	Negative Perceived Risk	-.412	.035	-.415	-11.728	.000
	Positive Perceived Risk	.262	.032	.269	8.323	.000

Therefore the answer of research question2 is not the same as hypothesis 2 which researcher defined that is there is a significant effect between environmental attitude, perceived risk, and environmental behavior of Thai people toward intention to purchase green products because from analysis found the result that only environmental attitude (H2.3) that can confirm. While perceived risk (H2.1) need to separate into 2 new factors. First is positive perceived risk factor which is the positive influential factor that affect toward intention to purchase green products and motivate people to buy and second is negative perceived risk factor which is the negative influential factor affect toward intention to purchase green products or can be explained that this factor is the barrier that make people do not dare to purchase a green product. Moreover, after running the Factor Analysis, the researcher found that the environmental behavior factor (H2.2) is non-significant. So it can conclude that only environmental attitude, positive perceived risk, and negative perceived risk are the influential factor that affects to intention to purchase green products in Thailand.

Research question3 is what is the characteristic of Thai people who have the intention to purchase the green product the most? Researcher run T-Test analysis to analyze the difference between gender (male and female) and run ANOVA Analysis to analyze the difference among 5 groups of demographics which are Age, Marital Status, Household, Income, and Education Level to identify what characteristics that have the intention to purchase the green product the most. For the gender, the researcher found that there are the different intention to purchase green products between male and female (Sig = 0.00 as shown in Table 4.6) by female has the intention to purchase the green product more than male (Mean = 3.66 > 3.15 in Table 4.7)

Table 4.6 Group Statistics of Gender - Intention to Purchase

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Purchase Intention And Green Behavior	Male	176	3.15	.676	.051
	Female	210	3.66	.512	.035

Table 4.7 Independent Sample Test of Gender - Intention to Purchase

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Purchase Intention And Green Behavior	Equal variances assumed	38.61	.00	-8.41	384	.00	-.51	.061	-.63	-.39
	Equal variances not assumed			-8.22	321.54	.00	-.51	.062	-.63	-.39

For the Marital Status, the result showed that there are the different purchase intention toward green products among Marital Status groups by people who married tend to have the intention to purchase green products more than people who are single and in the relationship (having girlfriend or boyfriend) by Sig = 0.00 as shown in Table 4.9, Mean = 3.84.Table 4.8.

Table 4.8 Descriptive of Marital Status - Intention to Purchase

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Single	247	3.26	.645	.041	3.18	3.34	2	5
In a relationship	91	3.67	.537	.056	3.55	3.78	2	5
Married	46	3.84	.455	.067	3.70	3.97	3	5
Total	384	3.43	.641	.033	3.36	3.49	2	5

Table 4.9 Purchase Intention and Green Behavior of Different Marital Status

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	**19.808**	**2**	**9.904**	**27.420**	**.000**
Within Groups	**137.617**	**381**	**.361**		
Total	**157.425**	**383**			

Similarly, after analyze the Household characteristic groups which consist of living alone, living with their partner, living with their parents, living with their partner and children, living with their parents and children, living with their parents, partner, and children characteristic on ANOVA Analysis, the result showed that it has the different intention to purchase green products among Household groups by people who are living alone tend to have less intention to purchase green products than others by Sig = 0.00 as shown in Table 4.11 and Mean = 3.06 in Table 4.10.

Table 4.10 Descriptive of Household - Intention to Purchase

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
living alone	145	3.06	.668	.055	2.95	3.17	2	5
living with my parents	155	3.52	.544	.044	3.44	3.61	2	5
living with my parents and child	14	3.87	.294	.078	3.70	4.04	3	4
living with my partner	41	3.88	.394	.061	3.76	4.01	3	5
living with my partner and child	13	3.74	.500	.139	3.44	4.04	3	5
living with my parents, partner, and child	15	3.97	.331	.086	3.78	4.15	3	5
living with my friend	3	3.63	.274	.158	2.95	4.31	3	4
Total	386	3.43	.644	.033	3.36	3.49	2	5

Table 4.11 Purchase Intention and Green Behavior of Different Household

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	**37.888**	**6**	**6.315**	**19.653**	**.000**
Within Groups	**121.776**	**379**	**.321**		
Total	**159.664**	**385**			

In contrast, the result after run ANOVA Analysis of the age, income, and education characteristic found that do not have the significant difference among their groups so the researcher will not count it to be the characteristics of people who have the intention to purchase green products.

Therefore, the research question3, what is the characteristic of Thai people who have the intention to purchase the green product?, it can be identified that the characteristic of Thai people who tend to have the intention to purchase the green products more than other groups is female who married and lives with a family such as parents, partner, or having at least one child at home.

CHAPTER V
RECOMMENDATIONS AND CONCLUSION

5.1 Discussion

In the literature reviews, mostly showed the same direction with the result in this study by the answer of research question 1 that there is a significant difference between people who used to buy green products and people who never bought the green product before in their environmental attitudes can confirm the study of Suchard & Polonski (1991) that they indicated that people who purchase green products will have the environmental concern more than others and will try to protect the environment in different ways through their behavior, thus it showed that people who used to buy green products have a positive attitude toward green products and concern about the environmental problems.

For the research question2, the study of Schultz, Zelezny, & Dalrymple (2000) stated that environmental attitude can reflect the intention to purchase the green products based on the consumers' attitude towards environmental problems, meanwhile, Durif, Roy, & Boivin (2012) indicated that perceived risks will be positive and motivate people to purchase green products when it comes to physical risk (the absence of long term risks to the body and human health) and psychosocial risk (giving the appearance of being a good person due to responsibility toward the environment) and will be negative or barrier toward purchase intention when it comes to financial risk, functional risk and Time risk. However, the result in this study showed that environmental behavior does not affect intention to buy green products, it can confirm the study of Pickett, Kangun, & Grove (1993) which stated that not everyone who has behavior to save the environment will spend more money for purchasing a green product.

Therefore, the result in this research which found that Environmental attitude and Positive perceived risk affect intention to purchase green products in positive way and Negative perceived risk affect as well but in the negative way can confirm both of the past researches above.

For the result of research question3 can confirm the study of Laroche, Bergeron, & Barbaro-Forleo (2001) that female who married and have children living at home are more willing to pay a higher price for green products than people who live alone by they supported this idea that this group of people is more likely think of how environmental problems may negatively impact to their partner as well as their parents and their children in the future. This reason could be a strong motivation for people who married to behave in an ecologically conscious fashion.

5.2 Conclusion

As this research aims to increase the understanding of the people who used to buy green products and people who never bought the green product perspective toward the green product and the environmental problem, also the factor influencing intention to purchase the green products. The analysis from doing the quantitative research found that environmental attitude, positive perceived risk, and negative perceived risk are the influential factor that affects toward intention to purchase green products. More than that, people who used to buy green products tend to concern about environmental problems, have a positive attitude toward green products, and have the intention to purchase the green product more than people who never bought the green product before that have less concern about the environmental problems than the first group.

This research also found that people who used to buy green products tend to concern the type of perceived risks different from people who never bought the green product before by most of them will concern about the physical risk (green products are safer than regular products) and the psychosocial risk (if do not use the green product, people will think that you do not have the responsibility toward the environment) which motivate them to buy the green products. While, people who never bought the green product will concern about the functional risk, financial risk, and time risk and all of these will be a barrier for purchasing a green product. In addition, the analysis indicated that female tend to have the intention to buy green products than male and also found that people who married and living with family include having at least one child at home tend to have the intention to buy green products than people who live alone.

5.3 Research Limitation

In conducting this research, there are some limitations which should be noted. As researcher rather have a short time in preparing and collecting the data for doing the quantitative survey, thus, all the research process was hastily processed in the limit of time included analysis part. The sampling is also my limitation in conducting this research. Due to the sampling who never bought the green product before are smaller than the sampling who used to buy green products by in this research got the respondents who never bought the green product before only 113 persons (29.3%) while the respondents who used to buy green products are 273 persons (70.7%). Include some sampling, they did not aware that the product which they buy is a green product or not. As these limitations, future research should do the qualitative method in order to gain more information to support the quantitative result and enlarge the sample size in the quantitative method for more accurate information.

5.4 Recommendations

The objective of this research is to improve understanding about the environmental attitude, behavior, and perceived risk of Thai people to elaborate on marketing strategies for the companies. As a result of the research method, companies can use it to be the benefits for creating the strategies that attract, satisfy, and reach to the customer's heart. From the result, the companies should select the female who married or lives with family be the main target group of customer due to this group has the potential to purchase green products more than others. Most of the customers giving the priority to the safety of a product are the important condition to decide that they will buy the product or not, it can see from the result which they agree to buy green products due to they think it safer than a regular product. In this case, the safety of products covers into 2 scopes which are safe to the health of users and safe to the environment. Therefore, the companies should develop this point and communicate with the customers for motivating them to buy the green product. More than that the result also showed that most of people have intention to purchase the green product because they want to create the self-image due to they afraid that if they do not use a green product, other people will think that they do not have the responsibility toward environment.

Therefore, the company can communicate with the customers about developing the self-image by using the green product to motivate people to purchase the product. However, most of the people do not dare to buy green products due to the price is very high, so companies should make them feel that green products are worthy to buy and confident in the quality of it for removing the purchase barrier.

Furthermore, from the analysis the result showed that nowadays people concern more about environmental problems, most of Thai people accept to pay more if the product that they will buy can help save the world and reduce the environmental problems, thus if the companies do the green campaign such as reducing plastic bag campaign or creating new product line under the "green" or "save environment" concept will help attract the main target group of customer, help companies have a good image in customer perspective and increase the sale of companies at the same time.

In the future, this research should identify in deeply detail and compare about the difference of environmental behavior and perceived risk of people who used to buy green products and people who never bought the green product before also specific only one type of green products such as recycled product to study about it in deeply detail and to understand more about consumer behavior include the reason that can be a barrier of purchasing the green products in order to find the good solution to solve it and gain or explore the new target group of customer to motivate them to concern more about the environmental problem and become a part to help save our world together.

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Appendix A: Questionnaire Survey

Dear, Respondents

The researcher is the master degree student at College of Management Mahidol University and does this research belongs to the project of the thematic paper subject. The researcher is interested in the environmental attitude and influential factors toward the intention to buy the green product in Thailand. This survey will take time only 5-10 minutes, Thank you

A green product is a production of raising concerns about global warming, increasing pollution levels, decreasing natural resource, and the overflowing of wastes. Customers change environmental concerns into their strong commitment to purchase and use green products.

A green product is a product that can reuse, recycling, and reduce the environmental problem such as bottle, recycled paper, and eco-friendly dishwashing

1. Why you bought green products?

□ I have never bought a green product before

□ I want to be more environmentally friendly

□ I think it gives me prestige

□ I want to be a good example for my kids, friends, or family members

□ I did not aware that is a green product

□ Other: _____

2. How much money do you spend on green products per month?

□ I have never bought a green product before

□ Less than 500 THB

□ 501 – 600 THB

□ 601 – 700 THB

□ 701 – 800 THB

□ 801 – 900 THB

□ 901 – 1,000 THB

□ More than 1,000 THB

3. How often do you use a green product per month?

□ I have never bought a green product before

□ Almost every day

□ Around 3 or 4 times per month

□ Less than once per month

4. I know this/these environmental problems.

□ Acid rain

□ Water pollution

□ Air pollution

□ Global warming

□ Ozone layer depletion

□ Pollution from pesticides/insecticides

□ Other: _____

Please choose the scale that matches with your thought the most.

(1 = Strongly disagree, 2 = Disagree, 3 = Moderate, 4 = Agree, 5 = Strongly agree)

Environmental Attitude	1	2	3	4	5
1. I agree with reducing plastic bag campaign					
2. The environment is the most important issues facing society today					
3. I feel bad with products from companies accused of being Polluters					
4. I feel that using plastic knives, forks, or spoons affect to the environment					
5. A green product is a good idea					
6. When I think of the ways industries are causing pollution, I get frustrated and angry					
8. It is acceptable to pay 10 percent more for a product that is produced, processed, and packaged in an environmentally friendly way					

Please choose the scale that matches with your thought the most.

(1 = Never, 2 = Hardly, 3 = Sometimes, 4 = Often, 5 = Very often)

	1	2	3	4	5
I use a green product to protect environment although sometime it will make me inconvenience					
I am using a cloth bag instead of a plastic bag					
I throw the garbage based on the type of rubbish bin such as Yellow Bin for recyclable waste, Green Bin for biodegradable waste					
I am using a reusable tumbler for water, coffee/tea, and other drinks					
I have reused product such as water, bottle, and paper					
I refuse to get the straw when I eat at the restaurant					

Please choose the scale that matches with your thought the most.

(1 = Strongly disagree, 2 = Disagree, 3 = Moderate, 4 = Agree, 5 = Strongly agree)

	1	2	3	4	5
I think the price of a green product is expensive					
I think green products have a short lifetime					
I afraid that buying a green product is not a good investment					
I afraid that if I do not use green product people will think that I don't have a responsibility toward the environment					
I think the green product will be safer for my health than a regular product					
I afraid that the quality and safety of the green product is not as good as a regular product					

	1	2	3	4	5
I am interested in green products					
I will recommend other people to purchase a green product					
I consider switching to other brands which are friendly toward the environment					
I will start purchasing a green product within the next month					
I will buy only the product that companies (brand) are acting responsibly toward the environment					
I will buy only the product that friendly toward the environment					
I intend to buy a green product because of my environmental concern					

1. Age

□ Under 20 years old

□ 20-29 years old

□ 30-39 years old

□ 40-49 years old

□ 50-59 years old

□ 60 years old or above

2. Gender

□ Male

□ Female

3. Marital status

□ Single

□ In a relationship

□ Married

□ Divorced

□ Widowed

4. **Household**

□ Living alone

□ Living with my partner

□ Living with my parents

□ Living with my partner and children

□ Living with my parents and children

□ Living with my parents, partner, and children

□ Other: _____

5. Education

□ High school degree

□ Bachelor degree

□ Master degree

□ Doctoral degree

Other: _____

6. Monthly Income

□ Below 20,000 THB

□ 20,001 – 30,000 THB

□ 30,001 – 40,000 THB

□ 40,001 – 50,000 THB

□ 50,001 – 60,000 THB

□ 70,001 – 80,000 THB

□ 80,001 – 90,000 THB

□90,001 – 100,000 THB

□ Above 100,000 THB

Appendix B: Statistical Package for the Social Sciences (SPSS)

1. Research Question1

T-Test (Environmental Attitude between different Purchase Behavior)

Group Statistics

	Purchaser	N	Mean	Std. Deviation	Std. Error Mean
I agree with reducing plastic bag campaign	used to buy	273	4.72	.558	.034
	never bought	113	4.21	.619	.058
The environment is the most important issue facing society today	used to buy	273	4.63	.593	.036
	never bought	113	4.09	.620	.058
I feel bad with products from companies accused of being polluters	used to buy	273	4.12	.836	.051
	never bought	113	2.91	.739	.069
I feel that using plastic knives, forks, or spoons affect to the environment	used to buy	273	4.31	.875	.053
	never bought	113	3.36	.708	.067
I think a green product is a good idea	used to buy	273	4.74	.529	.032
	never bought	113	4.08	.553	.052
When I think of the way industries are causing pollution, I get frustrated and angry	used to buy	273	3.84	.894	.054
	never bought	113	2.50	.757	.071
It is acceptable to pay 10 percent more for a product that is produced, processed, and packaged in an environmentally friendly way	used to buy	273	4.07	.911	.055
	never bought	113	1.67	1.039	.098

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
I agree with reducing plastic bag campaign	Equal variances assumed	4.010	.046	7.893	384	.000	.509	.065	.382	.636
	Equal variances not assumed			7.564	191.275	.000	.509	.067	.376	.642
The environment is the most important issue today	Equal variances assumed	5.709	.017	8.054	384	.000	.542	.067	.409	.674
	Equal variances not assumed			7.904	200.869	.000	.542	.069	.406	.677
I feel bad with products from companies accused of being polluters	Equal variances assumed	8.574	.004	13.322	384	.000	1.206	.091	1.028	1.384
	Equal variances not assumed			14.025	235.121	.000	1.206	.086	1.036	1.375
I feel that using plastic knives, forks, or spoons affect to the environment	Equal variances assumed	8.792	.003	10.182	384	.000	.945	.093	.762	1.127
	Equal variances not assumed			11.106	256.196	.000	.945	.085	.777	1.112
I think a green product is a good idea	Equal variances assumed	.929	.336	11.073	384	.000	.664	.060	.546	.782
	Equal variances not assumed			10.867	200.878	.000	.664	.061	.543	.784
When I think of the way industries are causing pollution, I get frustrated and angry	Equal variances assumed	2.871	.091	13.886	384	.000	1.331	.096	1.142	1.519
	Equal variances not assumed			14.872	244.998	.000	1.331	.089	1.154	1.507
It is acceptable to pay 10 percent more for a eco-friendly product	Equal variances assumed	3.217	.074	22.557	384	.000	2.397	.106	2.188	2.606
	Equal variances not assumed			21.362	186.824	.000	2.397	.112	2.176	2.618

2. Research Question 2

Factor Analysis

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
I agree with reducing plastic bag campaign	4.57	.621	386
The environment is the most important issue facing society today	4.47	.649	386
I feel bad with products from companies accused of being polluters	3.76	.977	386
I feel that using plastic knives, forks, or spoons affect to the environment	4.03	.934	386
I think a green product is a good idea	4.55	.615	386
When I think of the way industries are causing pollution, I get frustrated and angry	3.45	1.049	386
It is acceptable to pay 10 percent more for a product that is produced, processed, and packaged in an environmentally friendly way	3.37	1.447	386
I use a green product to protect environment although sometime it will make me inconvenience	3.34	1.153	386
I am using a cloth bag instead of a plastic bag	3.17	1.475	386
I throw the garbage based on the type of rubbish bin such as a yellow bin for recyclable waste	3.63	1.100	386
I am using a reusable tumbler for water, coffee/tea, and other drinks	3.12	1.512	386
I have resued product such as water, bottle, and paper	3.90	.999	386
I refuse to get the straw when I eat at the restaurant	3.17	1.366	386
I think the price of a green product is expensive	4.19	.819	386
I think green products have a short lifetime	3.50	1.091	386
I afraid that buying a green product is not a good investment	2.90	1.310	386
I afraid that if I do not use a green product people will think that I do not have a responsibility toward the environment	2.30	1.056	386
I think the green product will be safer for my health than a regular product	2.00	1.051	386
I afraid that the quality and safety of the green product is not as good as a regular product	2.93	1.252	386

Total Variance Explained

Component		Initial Eigenvalues			Rotation Sums of Squared Loadings		
		Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
dimension0	1	9.063	47.701	47.701	6.050	31.843	31.843
	2	2.180	11.474	59.175	4.327	22.773	54.616
	3	1.329	6.992	66.167	2.195	11.552	66.167
	4	.840	4.419	70.587			
	5	.714	3.757	74.343			
	6	.593	3.120	77.464			
	7	.557	2.930	80.393			
	8	.489	2.572	82.966			
	9	.457	2.403	85.369			
	10	.441	2.322	87.690			
	11	.366	1.928	89.618			
	12	.344	1.810	91.428			
	13	.302	1.587	93.015			
	14	.280	1.475	94.490			
	15	.257	1.352	95.843			
	16	.244	1.283	97.125			
	17	.200	1.054	98.179			
	18	.189	.997	99.176			
	19	.157	.824	100.000			

Rotated Component Matrix[a]

	Component		
	1	2	3
I afraid that buying a green product is not a good investment	-.755		
I am using a cloth bag instead of a plastic bag	.738	.447	
I am using a reusable tumbler for water, coffee/tea, and other drinks	.735		
I use a green product to protect environment although sometime it will make me inconvenience	.727	.433	
I think green products have a short lifetime	-.718		
I afraid that the quality and safety of the green product is not as good as a regular product	-.713		.445
It is acceptable to pay 10 percent more for a product that is produced, processed, and packaged in an environmentally friendly way	.710	.530	
I have resued product such as water, bottle, and paper	.673		
I refuse to get the straw when I eat at the restaurant	.671	.452	
I think the price of a green product is expensive	-.645		
I throw the garbage based on the type of rubbish bin such as a yellow bin for recyclable waste	.640		
I feel that using plastic knives, forks, or spoons affect to the environment		.759	
The environment is the most important issue facing society today		.755	
I agree with reducing plastic bag campaign		.748	
I think a green product is a good idea		.714	
I feel bad with products from companies accused of being polluters	.461	.578	
When I think of the way industries are causing pollution, I get frustrated and angry	.449	.554	
I think the green product will be safer for my health than a regular product			.845
I afraid that if I do not use a green product people will think that I do not have a responsibility toward the environment			.758

Factor Analysis

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
I agree with reducing plastic bag campaign	4.57	.621	386
The environment is the most important issue facing society today	4.47	.649	386
I feel that using plastic knives, forks, or spoons affect to the environment	4.03	.934	386
I think a green product is a good idea	4.55	.615	386
I think the price of a green product is expensive	4.19	.819	386
I think green products have a short lifetime	3.50	1.091	386
I afraid that buying a green product is not a good investment	2.90	1.310	386
I afraid that if I do not use a green product people will think that I do not have a responsibility toward the environment	2.30	1.056	386
I think the green product will be safer for my health than a regular product	2.00	1.051	386

Total Variance Explained

Component		Initial Eigenvalues			Rotation Sums of Squared Loadings		
		Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
dimension0	1	3.262	36.245	36.245	2.570	28.552	28.552
	2	1.722	19.134	55.380	2.020	22.445	50.997
	3	1.189	13.215	68.595	1.584	17.598	68.595
	4	.591	6.568	75.163			
	5	.548	6.087	81.250			
	6	.497	5.520	86.770			
	7	.456	5.067	91.838			
	8	.427	4.741	96.578			
	9	.308	3.422	100.000			

Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.262	36.245	36.245	2.570	28.552	28.552
2	1.722	19.134	55.380	2.020	22.445	50.997
3	1.189	13.215	68.595	1.584	17.598	68.595
dimension0 4	.591	6.568	75.163			
5	.548	6.087	81.250			
6	.497	5.520	86.770			
7	.456	5.067	91.838			
8	.427	4.741	96.578			
9	.308	3.422	100.000			

Rotated Component Matrix[a]

	Component		
	1	2	3
I agree with reducing plastic bag campaign	.782		
The environment is the most important issue facing society today	.782		
I feel that using plastic knives, forks, or spoons affect to the environment	.775		
I think a green product is a good idea	.758		
I think green products have a short lifetime		.829	
I think the price of a green product is expensive		.793	
I afraid that buying a green product is not a good investment		.768	
I think the green product will be safer for my health than a regular product			.861
I afraid that if I do not use a green product people will think that I do not have a responsibility toward the environment			.838

Reliability

Reliability – Environmental Attitude

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.788	.802	4

Reliability – Negative perceived risk

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.754	.762	3

Reliability – Positive perceived risk

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.663	.663	2

Reliability – Intention to purchase green products

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.943	.948	7

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.787[a]	.619	.616	.55048

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	187.870	3	62.623	206.657	.000[a]
	Residual	115.758	382	.303		
	Total	303.628	385			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.137	.315		3.604	.000
	Environmental Attitude	.738	.056	.465	13.191	.000
	Negative Perceived Risk	-.412	.035	-.415	-11.728	.000
	Positive Perceived Risk	.262	.032	.269	8.323	.000

3. Research question 3

T-Test (Gender - Intention to Purchase)

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Purchase Intention And Green Behavior	Male	176	3.15	.676	.051
	Female	210	3.66	.512	.035

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Purchase Intention And Green Behavior	Equal variances assumed	38.61	.00	-8.41	384	.00	-.51	.061	-.63	-.39
	Equal variances not assumed			-8.22	321.54	.00	-.51	.062	-.63	-.39

Oneway (Marital Status - Intention to Purchase)

Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Single	247	3.26	.645	.041	3.18	3.34	2	5
In a relationship	91	3.67	.537	.056	3.55	3.78	2	5
Married	46	3.84	.455	.067	3.70	3.97	3	5
Total	384	3.43	.641	.033	3.36	3.49	2	5

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	19.808	2	9.904	27.420	.000
Within Groups	137.617	381	.361		
Total	157.425	383			

Post Hoc Tests

Multiple Comparisons

(I) Status	(J) Status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Single	In a relationship	-.406*	.074	.000	-.58	-.23
	Married	-.576*	.097	.000	-.81	-.34
In a relationship	Single	.406*	.074	.000	.23	.58
	Married	-.170	.109	.354	-.43	.09
Married	Single	.576*	.097	.000	.34	.81
	In a relationship	.170	.109	.354	-.09	.43

Oneway (Household - Intention to Purchase)

Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
living alone	145	3.06	.668	.055	2.95	3.17	2	5
living with my parents	155	3.52	.544	.044	3.44	3.61	2	5
living with my parents and child	14	3.87	.294	.078	3.70	4.04	3	4
living with my partner	41	3.88	.394	.061	3.76	4.01	3	5
living with my partner and child	13	3.74	.500	.139	3.44	4.04	3	5
living with my parents, partner, and child	15	3.97	.331	.086	3.78	4.15	3	5
living with my friend	3	3.63	.274	.158	2.95	4.31	3	4
Total	386	3.43	.644	.033	3.36	3.49	2	5

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	37.888	6	6.315	19.653	.000
Within Groups	121.776	379	.321		
Total	159.664	385			

Post Hoc Tests

Multiple Comparisons

(I) Household	(J) Household	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
living alone	living with my parents	-.463*	.065	.000	-.66	-.26
	living with my parents and child	-.808*	.159	.000	-1.29	-.32
	living with my partner	-.822*	.100	.000	-1.13	-.52
	living with my partner and child	-.678*	.164	.001	-1.18	-.18
	living with my parents, partner, and child	-.905*	.154	.000	-1.38	-.44
	living with my friend	-.568	.331	1.000	-1.58	.44

living with my parents	living alone	.463*	.065	.000	.26	.66
	living with my parents and child	-.345	.158	.626	-.83	.14
	living with my partner	-.359*	.100	.007	-.66	-.05
	living with my partner and child	-.215	.164	1.000	-.72	.29
	living with my parents, partner, and child	-.443	.153	.086	-.91	.03
	living with my friend	-.106	.330	1.000	-1.12	.91
living with my parents and child	living alone	.808*	.159	.000	.32	1.29
	living with my parents	.345	.158	.626	-.14	.83
	living with my partner	-.014	.175	1.000	-.55	.52
	living with my partner and child	.130	.218	1.000	-.54	.80
	living with my parents, partner, and child	-.098	.211	1.000	-.74	.55
	living with my friend	.239	.361	1.000	-.86	1.34

living with my partner	living alone	.822*	.100	.000	.52	1.13
	living with my parents	.359*	.100	.007	.05	.66
	living with my parents and child	.014	.175	1.000	-.52	.55
	living with my partner and child	.144	.180	1.000	-.41	.70
	living with my parents, partner, and child	-.083	.171	1.000	-.61	.44
	living with my friend	.254	.339	1.000	-.78	1.29
living with my partner and child	living alone	.678*	.164	.001	.18	1.18
	living with my parents	.215	.164	1.000	-.29	.72
	living with my parents and child	-.130	.218	1.000	-.80	.54
	living with my partner	-.144	.180	1.000	-.70	.41
	living with my parents, partner, and child	-.227	.215	1.000	-.88	.43
	living with my friend	.110	.363	1.000	-1.00	1.22

living with my parents, partner, and child	living alone	.905*	.154	.000	.44	1.38
	living with my parents	.443	.153	.086	-.03	.91
	living with my parents and child	.098	.211	1.000	-.55	.74
	living with my partner	.083	.171	1.000	-.44	.61
	living with my partner and child	.227	.215	1.000	-.43	.88
	living with my friend	.337	.359	1.000	-.76	1.43
living with my friend	living alone	.568	.331	1.000	-.44	1.58
	living with my parents	.106	.330	1.000	-.91	1.12
	living with my parents and child	-.239	.361	1.000	-1.34	.86
	living with my partner	-.254	.339	1.000	-1.29	.78
	living with my partner and child	-.110	.363	1.000	-1.22	1.00
	living with my parents, partner, and child	-.337	.359	1.000	-1.43	.76