**THE FACTORS AFFECTING YOUNG THAI CONSUMERS'
ECO-FASHION PRODUCT PURCHASE DECISION**

**SATHAPAT RUJICHAIYAWAT**

**A THEMATIC PAPER SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF MANAGEMENT
COLLEGE OF MANAGEMENT
MAHIDOL UNIVERSITY
2016**

Thematic paper
entitled
# THE FACTORS AFFECTING YOUNG THAI CONSUMERS' ECO-FASHION PRODUCT PURCHASE DECISION

was submitted to the College of Management, Mahidol University
for the degree of Master of Management
on
August 21, 2016

……………………………..………
Mr. Sathapat Rujichaiyawat
Candidate

…………………………..………
Asst. Prof. Prattana Punnakitikashem,
Ph.D.
Advisor

…………………………..………
Assoc. Prof. Roy Kouwenberg,
Ph.D., CFA
Chairperson

…………………………..………
Assoc. Prof. Annop Tanlamai,
Ph.D.
Dean
College of Management
Mahidol University

…………………………..………
Simon Zaby,
Ph.D.
Committee member

# ACKNOWLEDGEMENTS

**THE FACTORS AFFECTING YOUNG THAI CONSUMERS' ECO-FASHION PRODUCT PURCHASE DECISION**

SATHAPAT RUJICHAIYAWAT 5749235

M.M. (MARKETING AND MANAGEMENT)

THEMATIC PAPER ADVISORY COMMITTEE: ASST. PROF. PRATTANA PUNNAKITIKASHEM, Ph.D., ASSOC. PROF. ROY KOUWENBERG, Ph.D., SIMON ZABY, Ph.D.

ABSTRACT

Since the growth of green markets including the market for eco-fashion are now thriving especially among young people, right marketing strategies and communications are inevitably needed to stay in the competition. Accordingly, this research aims to investigate what could be influential factors towards young people's eco-fashion product purchase intention. To answer research question, quantitative approach are used. In terms of respondents, this research aims to study young people who are described to be at the age of 15-24. As the convenience of the researcher are primarily concerned, the respondents are collected solely in Bangkok and near areas. After data analysis, there are only 4 factors remaining and having strong relationship towards young Thai consumers' eco-fashion product purchase decision which are social influence, concern for self-image, environmental knowledge and perceived environmental responsibility respectively. Furthermore, however, the result also shows that young Thai consumers tend to adopt green practices or buy eco-fashion products as a way of self-fulfilment. Unlikely, they all truly concern the environmental issues.

KEY WORDS: Eco-fashion/ Purchasing Intention/ Young Generation/ Environment

71 pages

# CONTENTS

# CONTENTS (cont.)

# LIST OF TABLES

# LIST OF FIGURES

# CHAPTER I

# INTRODUCTION

The world is now confronting a great number of environmental problems from air and water pollution, waste disposal to acid rain and climate change. Undoubtedly, those catastrophes have a severe effect on humankind and every creature on this planet. Further, still, a wealth of new and challenging environmental problems seem to have incessantly caused more difficulties to people lives across the regions every day. There is no denying, the aforementioned concerns are originated from consumer practices and consumptions (Rinkesh, 2014). However, in relation, the business scale is part of the problems through its operations as well.

Fashion industry, in the same way, has a huge impact on global environment (Battaglia et al., 2014). As accused of unethical practices, approximately, 30 million tons of textile are globally consumed a year which cause social and environmental impacts within supply chain (Chen and Burns, 2006). Also included, apparel manufacturers are often accused of discharging toxic chemicals such as carbon monoxide and volatile organic compounds into the environment (Shen et al., 2012). Furthermore, Shen et al. (2012) mentioned that not only are the chemicals being discharged in increasing rate due to an increase in demand for the synthetic fibres used in apparel production, chemical fertilisers and pesticides are also considerably used in plating cotton which both actually pollute the ecosystem and harms humans. Indeed, all stages of product life cycle in apparel industry, from the fibre growing, product manufacturing and distribution, to disposal, consolidate specifically environmental degradation (Allwood el al.,2006; Shaw et al., 2006; Gam and Banning, 2011; Walker, 2008; Winge, 2008; Fulton and Lee, 2010). Due to the problems, sustainability are now the crucial issue in fashion industry (Battaglia et al., 2014).

To respond the increasing demand for environmentally-friendly products, companies start introducing variety of initiative green products and services (Danjelico and Pujari, 2010; Chan et al.,2013) and green supply chain management (Tseng et al., 2013; Wang and Chan, 2013). Besides, being effective sustainable fashion firms positively affect on their brand image and also help them reach a wider range of ethical customers (Faisal, 2010). In relation, as the way to promote the brands' social and environmental responsibility, being sustainable could help the brands gain the competitive advantage in the market (Yang et al., 2010). Recently, there are a number of apparel brands now placing importance on the environmental issue and incorporating sustainable practices to their firms such as H&M, Uniqlo, The North Face and New Balance (Shen, 2014).
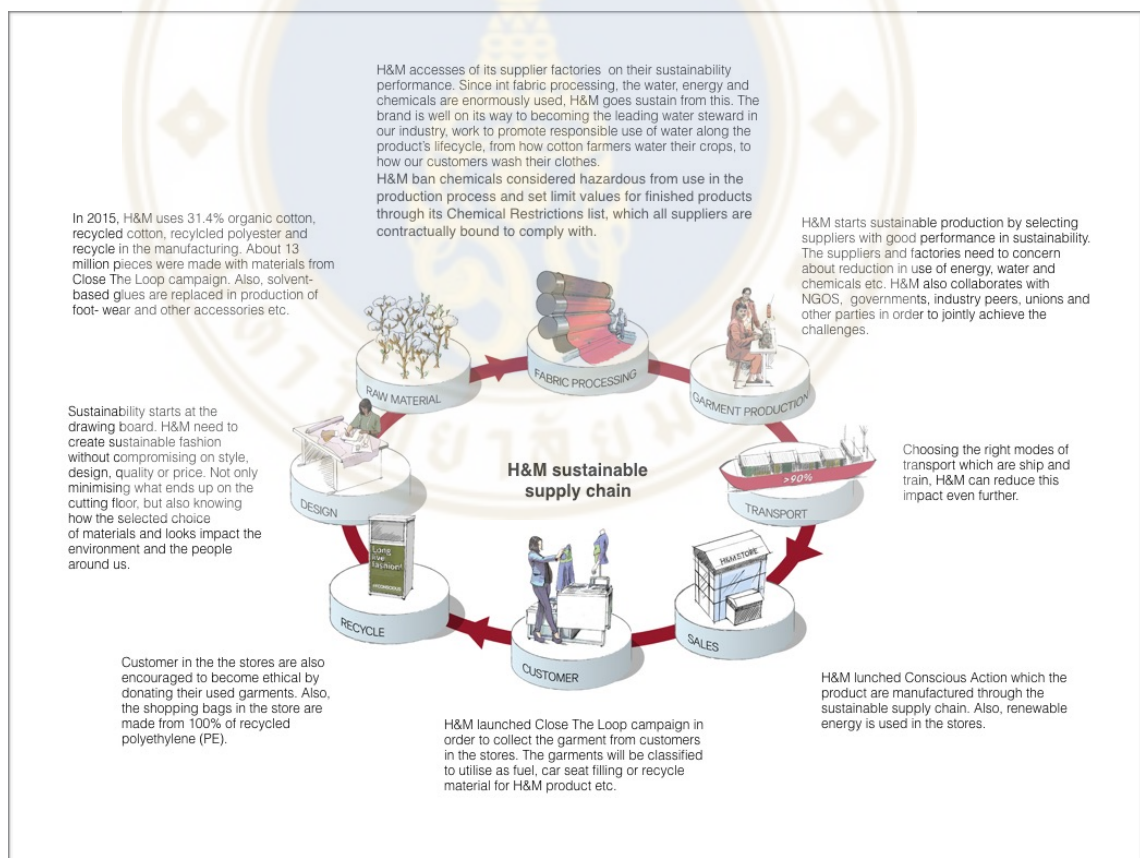


**Figure 1.1 The picture showing H&M as the example of sustainable supply chain**
Sources: H&M website and H&M Sustainability Report (2015).

Whilst environmentally-friendly or sustainable fashion is defined as the type of clothing which is manufactured with taking ecological impacts into consideration though sustainable material selection (e.g. use of organic cotton or recycled materials) and environmentally responsible production processes (e.g. dye with natural dyestuff) (Joergens, 2006; Fletcher 2008), Stella McCartney would be the great example of fashion brands producing eco-fashion products. The fashion brand commit itself to sustainable responsibility from use of recycle fabrics and organic cotton, no use of PVC, no use animal leather, skins, feathers or fur in any products, to no animal testings in its fragrance manufacturing (Stella McCartney's website, 2016).

Likewise, H&M, a well-known Swedish fast fashion brand, adopt sustainable practices to its supply chain (Shen, 2014). H&M launched the sustainable program called 'Conscious Action', which the products are intentionally made with the concern of clean water, climate change, textile waste and carbon emission in distribution. Accordingly, organic cotton, recycled polyester and materials are used in H&M apparel manufacturing (H&M's sustainability report, 2015). Also, in order to reduce carbon emission in distribution, the brand aims to use clean modes of transport which are the ferry and train (De Brito, 2008).
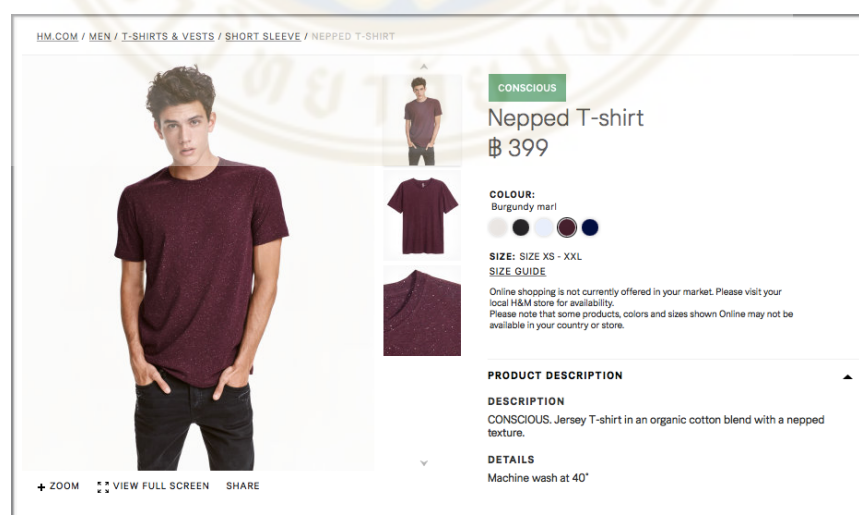


**Figure 1.2 Picture of H&M sustainable T-shirt details**

Sources: H&M website

Not only are the fashion firms minimising the pollutants, customers are also attempting to participate in environmental reserve (Shen et al., 2012). The ecological deterioration concerns create environmental ethics which have significantly influenced individuals' awareness and their consumption behaviour (Jang et al., 2011). Especially, who have grown up in the time in which the environmental concerns have been a salient issue, younger generation is likely to be more sensitive to those issues (Straughan and Roberts, 1999) and support natural protection (Matinsons et al., 1997).

In terms of consumer behaviour, moreover, younger buyers tend to be more flexible than other generations, search more information about products before their actual purchases, decide on their selection depending on their personal affective response. Imperatively, they do concern about the future believing it is the effect of their present actions. According to the characteristics mentioned and their level of judgement, young generation has more ability to reflect on their choice of environmentally-friendly products and prefers to become ethical customers in the green market (Smola and Sutton, 2002; Heaney, 2006; Hume; 2010).

According to the information from Department of Economic and Social Affairs, Population Devision of United Nation, the pyramid graph below exhibits the distribution of the world's population by age and sex (2015), which the majority seems younger at their age. The fact also pertains to UNICEF' statistic of Thai adolescent populations (2015) which is counted as approximately 13 percent of total population in the country which are seemingly the considerable numbers. In addition, adolescents tend to have their preferences and attitudes in common which could be noticed from their expenditure according to the result of Saimek (2009) and the previous researches. There is no explicit differences in what Asian and Western or Thai and American teenagers buy. Most of them spend similarly their money on Daily living goods and glooming supplies (Klinefelter et al., 2011; Saimek, 2009; Cote, 2014; UNICEF, 2006).
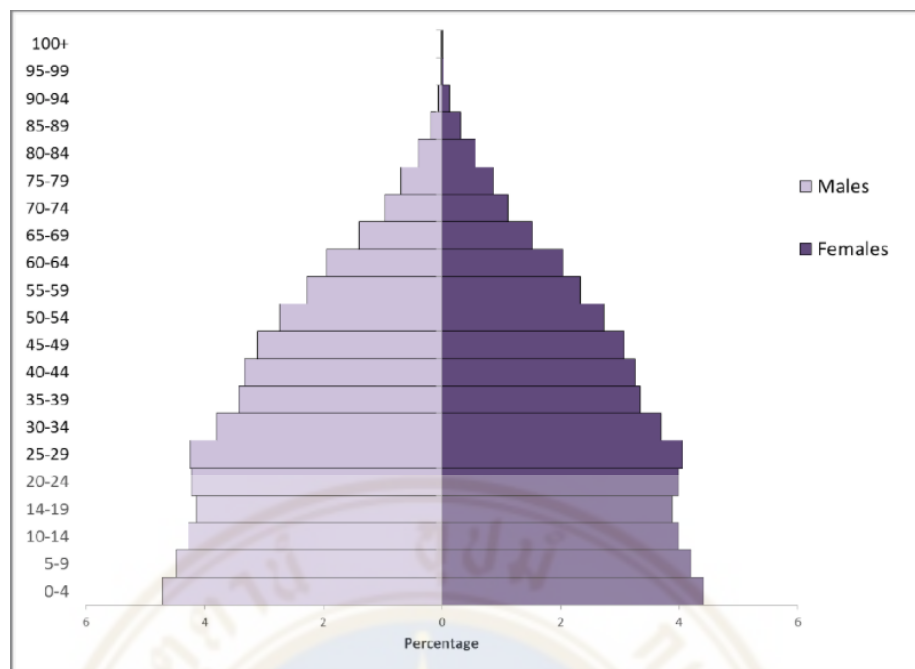
**Figure 1.3 Distribution of the worlds' population by age and gender in 2015**

Source: United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision. New York: United Nations.

## 1.1 Problem Statement

With a large number of citizens and their personal interests in fashion and clothing as aforementioned, adolescents could appropriately be the potential prospects for fashion apparel brands both in Thai and global aspects. Ultimately, their consciousness on environmental issues would be another empowering incentive for many apparel brands to go green while this market and specific demand on ecological products are gradually thriving and globally expanding. Nowadays, for example, Asian countries and their citizens are prevailingly forced to go green since there are also an increase in environmental threats in the region (Lee, 2008). However, the past researches about young consumers' motivation and intention to buy environmentally-friendly fashion products were widely conducted in developed countries but quite rare

in developing ones including Thailand. To develop the attractive and sustainable marketing strategies for Thai young consumers, so, more sophisticated understanding on their purchasing intention for green fashion product should be empirically investigated since they represent powerful future consumers (Smola and Sutton, 2002; Heaney, 2006; Hume; 2010).

## 1.2 Research Objectives

1. To study young Thai consumers' intention of purchasing environmentally-friendly fashion products

2. To investigate the degree of each factor's importance which most plausibly drive young Thai consumers to make their purchases of environmentally-friendly fashion products

## 1.3 Research Question

What are the most influencing factors which affect young Thai consumers' environmentally-friendly fashion product purchase decision?

## 1.4 Research Scope

Since young people are defined with the ages between 15 to 24 (United nation, 2004) the research is aimed to conduct among this group in order to study the purchase intention of people who are closely described as young consumers. However, this study of young consumers' eco-fashion purchase intention will solely focus on young people who study in Bangkok and nearly surrounding areas such as Nakhonpathom and Nonthaburi since the education might be well conducted around the city and the research conductor's convenience is necessarily concerned.

## 1.5 Expected Benefit

This research would be firstly useful for fashion brands which are now conscious of the environmental issues and opportunities from entering this growing market to also capturing potential and substantial young Thai consumers. The empirical results would be provided more explicit understanding on those target prospects's motivation and insight to the fashion firms which somehow benefits their marketing communication, promotion , strategy or other relevant policy constitution and development. Also, the theories, previous practical researches, the discovered results and constraints would be fundamentally advantageous for other research conductors to reveal deeper understanding on the green market and other consumer's aspects later on.
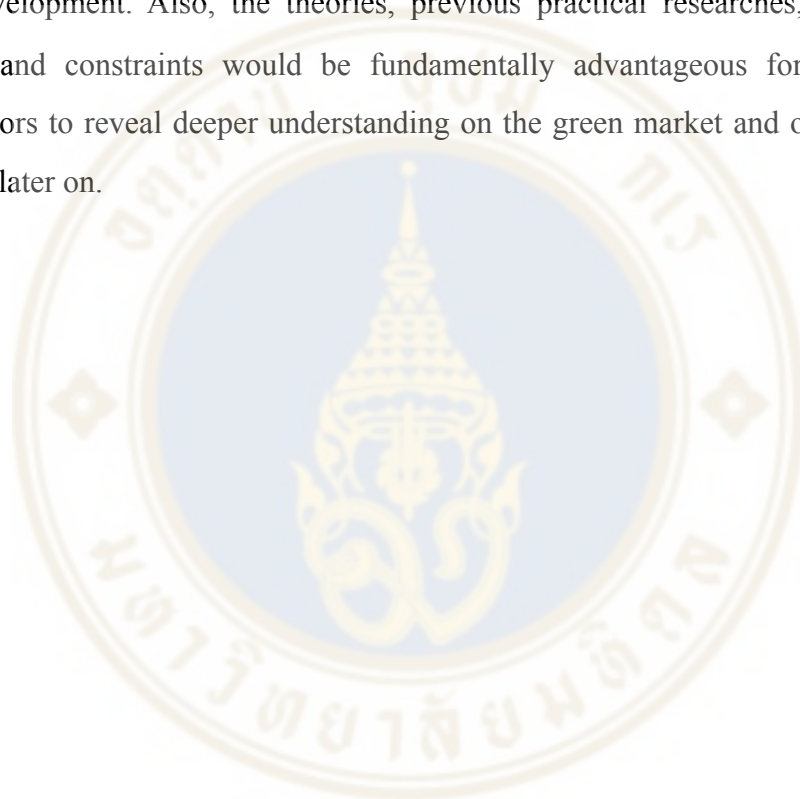
# CHAPTER II
# LITERATURE REVIEW

## 2.1 Eco-Fashion (ECF)

From previous researches, the word 'eco-fashion' is referred differently by researchers such as environmentally-friendly fashion, ecological fashion, green fashion or sustainable fashion (Joergen, 2006; Hill and Lee, 2012; Chan and Wong, 2012). However, eco-fashion is identically defined as the type of clothing designed and manufactured in order to minimise the negative environmental impacts (Joergen, 2006; Claudio, 2007; Ochoa, 2011). To take such impacts into account, the production of eco-fashion participates in using biodegradable or recycled materials (e.g. organic cotton ) and executing environmentally ethical manufacturing processes (e.g use of natural dyes ) (Joergens, 2006; Fletcher, 2008). In relation, eco-fashion involves with sustainable supply chain as a whole which is all about eco-material preparation, sustainable manufacturing, green distribution and retailing (Shen et al., 2014). Consequently, eco-fashion product is made along environmentally-friendly supply chain (Shen, 2014).

### 2.1.1 Eco-fashion supply chain

To be more explicated, fundamentally, the first part in sustainable supply chain is related to eco-material selection. Typically, the eco-fashion products are often manufactured by using organic fabrics, which use of less water and harmful chemicals is aimed (De Brito et al., 2008). In addition, recycling is very popular in fashion industry (Fletcher, 2008). Recycled materials such as old clothes, scarps or bottles are plausibly used as sustainable materials in eco-fashion (Anson, 2012). Furthermore, some fashion brand are engaging sustainability by developing biodegradable textile

which could decompose over time, such as Freitag, a Swiss fashion brand (Moulds, 2015).

In terms of sustainable manufacturing, the fabric should be processed and dyed using few toxic chemicals as possible such as those certified by the Global Organic Textile Standard (GOTS), Blue Sign or Cradle to Cradle (Greer, 2015). The article also mention to the compliance of wastewater discharge and air emission limits which all the information should be presented to the public as well.

While green distribution are in relation to reducing carbon emission according to the study of Nagurney and Yu (2012), choosing an efficient transportations is part of the green adoption. Greer (2015) also publish an article on the Business of Fashion's website indicated that garments should be transported by ship and rail since air shipment has 10 times negative environmental impacts on climate change. Also, shipping by truck are more polluting.

## 2.2 Green Product Purchase Decision

Green consumers are described as the ones who aware of the environmental impacts according to their consumption behaviour. In order to reduce the negative impacts, they tends to adjust their consumption and purchase behaviour. Typically, green purchase decision are related to the activities supporting the environmentally-friendly companies and making green product purchase (Albayrak et al.,2013; Schlegelmilch et al.,1996). In the research conducted by Prashant and Bhimrao (2015), the green purchase decision will be influenced by two factors which are categorised as intrinsic and extrinsic ones. As explained in his research, the extrinsic factor would be in relation to social image of consumers and other product criteria such as product quality, performance, price and promotion. About set of factors which are intrinsic to consumers, those would be related to consideration of their environmental responsibilities, quest for gaining knowledge, self-interest, and willing to specifically act for reducing ecological deterioration. However, there are similarities

among previous studies which some factors are often mentioned as influential variables towards green product purchase. As eco-fashion products are described as a type of green products, those factors should also have an influence on consumers' purchase decision in the the same way and some hypotheses are proposed:

### 2.2.1 Concern for Self-image

Since adolescence is a developmental period, some characteristics are common found in this group of people such as struggling with identity search, need for social acceptance, focus on self, and development of moral ideals (Shaffer, 1994). Unsurprisingly, self-image are significant in this stage of life. According to the study of Kaman Lee (2008) on young consumers' green purchase intention, the research conductors found that the image of a person adopting environmental practices is perceived from others impressively. Reasonably, the situation strongly encourages young consumer to take part in environmental reserve. Therefore, hypothesis on the issue is developed:

**H1:** Young consumers with concern for their self-image will have stronger intention to become involved in eco-fashion purchasing.

### 2.2.2 Environmental Attitude

Pawlowski A. (2011) mentioned to Sztumski's statement (1999) that an environmental attitude can be described as the readiness to take actions of degraded environment reserve by adopting the proper human-environment relation. As green purchasing is a mean of green practices and environment reserve (Newholm and Shaw, 2007; Pinto et al., 2011; Carrigan et al., 2004; Manchiraju and Sadachar, 2014), in relation, attitude towards green purchasing refers to consumers' cognitive evaluation of green purchase behaviour whether the actions are important. Since attitude has a positive impact of purchase behaviour (Roberts, 1996), the hypothesis between these two variables would be:

**H2:** Young consumers with positive environmental attitudes will have stronger intention to become involved in eco-fashion purchasing.

### 2.2.3 Environmental Concern

Environmental concern refers to the degree of emotional involvement in environmental issues. It supports the individuals' affective response to environment reserve (Lee, 2008). The finding of his study also suggested that Hong Kong adolescents' green purchase is more involved with emotional assessment rather than rationality. When an consumer perceives the seriousness of environmental problems, this will be the first stage of understand the various way of environmental reserve such as green purchase (Roberts, 1996). Then, the following hypothesis is developed:

**H3**: Young consumers with positive environmental concern will have stronger intention to become involved in eco-fashion purchasing.

### 2.2.4 Environmental Knowledge

Environmental knowledge is related to a general knowledge which people know how a products is manufactured, how it affects the environment, and how the collective responsibility is essential for sustainable development (Kaufmann et al., 2012). It also includes knowledge about green house effect, waste management, harmful waste and recycled materials. Also, there was a strong relationship between environmental knowledge and consumer behaviour (Mostafa, 2009). In relation, environmental knowledge has an impact on purchasing behaviour (Bonini and Oppenheim, 2008). In addition, Staughan and Roberts found that Education have also an influence on people's environmental attitudes. With the possibility mentioned, Therefore, hypothesis on environmental knowledge could be:

**H4:** Young consumers with positive environmental knowledge will have stronger intention to become involved in eco-fashion purchasing.

**2.2.5 Perceived Environmental Responsibility**

The stage of perceiving environmental responsibility is related to comsumers' personal commitment towards environmental issues and their individual-level activities participating in the environment quality improvement. Realising the adverse impact of environment on human being, consumers recognise their individual responsibility in environmental protection (Gadenne et al., 2011). Consumers who perceive their environmental responsibility believe that they can individually contribute to environmental protection by adopting green practices at individual levels (Kumar and Ghodeswar, 2015). Therefore, hypothesis of relation between individuals' perceived environmental responsibility and eco-fashion as a green product type could be:

**H5:** Young consumers who perceive their environmental responsibility will have stronger intention to become involved in eco-fashion purchasing.

**2.2.6 Social Influence**

Th other opinions have highly influence on consumer behaviour for the product consumption (Bearden and Rose, 1990). From gathering relevant information and interacting with others, consumers realise how the products are important (Oliver and Lee, 2010). Tikka et al. (2000) reveal the evidence found that it has a strong relationship between contextual factors and consumers behaviour since those factors influence individuals' thought. According to Lee's (2011), Promotosh and Sajedul (2011) framework, parental and peer influence are investigated as the contextual factors which the the outcomes of relationship between the factors and environmental behaviour are likewise significant. Hence, the following hypothesis is proposed:

**H6:** Social influence will positively affect young consumers' stronger intention to become involved in eco-fashion purchasing.

## 2.3 Summary Table

## Table 2.1 Table of factors summarising with related literatures

| Factors | Paper 1<br>Lee (2008),<br><br>Opportunities for green marketing: Young consumers | Paper 2<br>Promotosh and Sajedul (2011),<br><br>Young consumer's purchase intentions of buying green product | Paper 3<br>Shen et al. (2012),<br><br>The impact of ethical fashion on consumer purchase behaviour | Paper 4<br>Suki (2013),<br><br>Young consumer ecological behaviour: The effect of environmental knowledge, healthy food, and healthy way of life with the moderation of gender and age | Paper 5<br>Kanchanapibul et al. (2013),<br><br>An empirical investigation of green purchase behaviour among the young generation | Paper 6<br>Kumar and Ghodeswar (2015),<br><br>Factors affecting consumers' green product purchase decisions |
|---|---|---|---|---|---|---|
| Concern for self-image | Data source:<br>6,010 high school students in Hong Kong<br><br>Method:<br>Questionnaire<br><br>DV:<br>green product purchase intention<br><br>Finding:<br>Significant relationship towards DV.<br>Ranked in third top among all seven factors experimented. Also match with young consumer characteristics. | | | | Data source:<br>110 young people in UK<br><br>Method:<br>Questionnaire<br><br>DV:<br>Green product purchase intention<br><br>Finding:<br>The factor grouped as personal effect dimension with social influence, environmental concern and perceived environmental responsibility.<br>Show strong relationship towards DV. | |
| Environmental attitude | | | | | | Data source:<br>403 consumers in India<br><br>Methods:<br>Questionnaire<br><br>DV:<br>Green product purchase intention<br><br>Finding:<br>Indicating that consumers with positive predisposition towards green products; recognising the role of green product are more likely to buy green products |
| Environmental concern | Data source:<br>6,010 high school students in Hong Kong<br><br>Method:<br>Questionnaire<br><br>DV:<br>Green product purchase intention<br><br>Finding:<br>Identified as emotional assessment and show strong relationship towards DV.<br>Found to be the second top predictor of green purchasing behaviour among all seven factors. | | Data source:<br>120 fashion shopping respondents in Hong Kong<br><br>Method:<br>Questionnaire<br><br>DV:<br>Green product purchase behaviour<br><br>Finding:<br>Show strong relationship towards DV. The most influential factors compared to belief and knowledge on ecological issues. | | Data source:<br>110 young people in UK<br><br>Method:<br>Questionnaire<br><br>DV:<br>Green product purchase intention<br><br>Finding:<br>The factor grouped as personal effect dimension with social influence, self-image and perceived environmental responsibility.<br>Show strong relationship towards DV. | |

**Table 2.1 Table of factors summarising with related literatures (cont.)**

| Factors | Paper 1 Lee (2008), Opportunities for green marketing: Young consumers | Paper 2 Promotosh and Sajedul (2011), Young consumer's purchase intentions of buying green product | Paper 3 Shen et al. (2012), The impact of ethical fashion on consumer purchase behaviour | Paper 4 Suki (2013), Young consumer ecological behaviour: The effect of environmental knowledge, healthy food, and healthy way of life with the moderation of gender and age | Paper 5 Kanchanapibul et al. (2013), An empirical investigation of green purchase behaviour among the young generation | Paper 6 Kumar and Ghodeswar (2015), Factors affecting consumers' green product purchase decisions |
|---|---|---|---|---|---|---|
| Environmental Knowledge | | Data source: 282 young people in Sweden<br><br>Method: Questionnaire<br><br>DV: Green product purchase intention<br><br>Finding: Concluded as important background factor facilitating purchase intention of young consumers. | Data source: 120 fashion shopping respondents in Hong Kong<br><br>Method: Questionnaire<br><br>DV: Green product purchase behaviour<br><br>Finding: Show significant support towards DV. Also found that lack of knowledge of ethical fashion prevents consumers from translating their concern into actual sustainable purchase. | Data source: 200 young respondents practising ecological behaviour in Malaysia<br><br>Method: Questionnaire<br><br>DV: Ecological behaviour<br><br>Finding: Show significant relationship towards DV. Founded that media play a major role in educating people for the ecological issues then they use the knowledge for evaluating products. | Data source: 110 young people in UK<br><br>Method: Questionnaire<br><br>DV: Green product purchase intention<br><br>Finding: Statistic number of the knowledge dimension supports strong relationship between this predictor and green purchasing intention in young generation. | |
| Perceived environmental responsibility | Data source: 6,010 high school students in Hong Kong<br><br>Method: Questionnaire<br><br>DV: Green product purchase intention<br><br>Finding: Have strong relationship towards DV. Founded as one of the most influential key to successful green marketing among adolescents in Hong Kong (from seven predictors). | | | | Data source: 110 young people in UK<br><br>Method: Questionnaire<br><br>DV: Green product purchase intention<br><br>Finding: The factor grouped as personal effect dimension with social influence, self-image and environmental concern. Show strong relationship towards DV. | Data source: 403 consumers in India<br><br>Methods: Questionnaire<br><br>DV: Green product purchase intention<br><br>Finding: Factor founded statically significant. Indicate that individuals having awareness of their individual responsibility towards the environmental are more likely to purchase green products. |
| Social influence | Data source: 6,010 high school students in Hong Kong<br><br>Method: Questionnaire<br><br>DV: Green product purchase intention<br><br>Finding: Found significant relationship between social influence and DV. The predictor indicated as the most influential factor affecting young consumers's green purchase in HK. The factor matches with collectivist culture where individuals are expected to subordinate their interests to their social norms. | Data source: 282 young people in Sweden<br><br>Method: Questionnaire<br><br>DV: Green product purchase intention<br><br>Finding: The study separate the predictor into two variables; parental and peer influence. Both show strong relationship towards DV. As discovered parental influence is the most influential factor young adolescent green purchase in Sweden. | | | Data source: 110 young people in UK<br><br>Method: Questionnaire<br><br>DV: Green product purchase intention<br><br>Finding: The factor grouped as personal effect dimension with self-image, environmental concern and perceived environmental responsibility. Show strong relationship towards DV. | Data source: 403 consumers in India<br><br>Methods: Questionnaire<br><br>DV: Green product purchase intention<br><br>Finding: The relationship between social appeal and green product purchase is found statically significant. |

## 2.4 Theoretical Framework
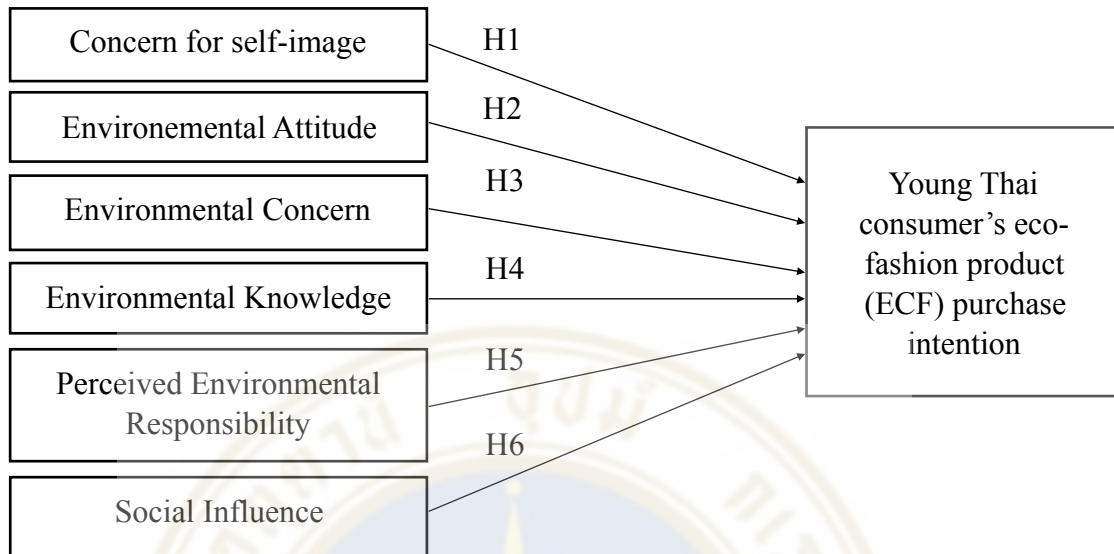


**Figure 2.1 The model of influential factors affecting young Thai consumers' eco-fashion product purchase decision**

# CHAPTER III
# METHODOLOGY

## 3.1 Research Setting and Instrument Development

According to Sekaran and Bougie statement (2009) indicated that the quantitative research is used as tool to understand what influence consumer behaviour and purchasing intention among respondents, this research aims to use the method to study the hidden personal reasons of young Thai consumers towards eco-fashion products purchase decision. The questionnaire is divided into three major sections. First of all, the multiple-choice questions related to normal purchase behaviour are asked to respondents in order to confirm whether current young generation in Thailand have expenditure patterns and behaviour as same as the previous studies. Also, the results of the section are able to ensure whether the respondents have their interests correlated with the study topic.

Subsequently, the second one is the main part of the questionnaire which aims to investigate the respondents about their purchase intention with the potential predictors accumulated from the past researches. The section consists of 39 specific questions which will be measured through 6-likert scaling technique in order to avoid midpoint responses since those have some limitations such as respondent's misinterpretation to midpoints, response set to midpoint, and socially desirable responses through midpoints (Tsang, 2012).

In terms of misinterpretation, midpoint responses could have two possible meaning which are a true neutral meaning and a meaning in sense of undecided opinions (nonsubstantive response or NSR) (Raaijmakers et al., 2000) including 'do not know', 'never thought about it', and 'no opinion' (Schuman and Presser, 1997; Tuohy and Stradling, 1987; Gilgen and Barnholtz, 1992). Even though the choices of NSR are separately provided, less respondents take the responses (Presser and

Schuman, 1980, Ayidiya and McClendon, 1990). Also, there are previous researches indicated that respondents with low-eduction tend to respond more often with NSRs (Francis and Busch, 1975; Converse, 1976; Althaus, 1996; Narayan and Krosnick, 1996). Plausibly, young generation, who are selectively sampled in this research, might cause the undesired actions. Furthermore, as this study is also in relation to ethical consumption (Szmigin et al., 2009, Shen et al., 2012), the use of NSRs probably increase since respondents would like to be ethical and socially desirable towards the environmental topic.

At last, the third section is designed to capture the personal information of the respondents such as age, gender and education level in order to assure whether the survey are conducted with the accurate group of people. As shown in the questionnaire, this part aims to be situated in the last part since the demographic questions or too many questions before answering the specific questions could bother respondents according to the proper survey layout in New Product Positioning handouts by Shannon (2016).

## 3.2 Population and Sample Size

Aforementioned in the research scope, this study aims to approach the young people at their age of 15 to 24 who are closely described as young consumers. According to the research on expenditure patterns of Thai adolescents by Manipat (2009), this group of people in Thailand are seemingly in the studying period, which education is found in the study of Liere and Dunlap (1980) to be indeed supportive of having environmental consciousness. Appropriately, Manipat also indicated that this group have their own abilities to pay for their daily living and preferences which a major part often involves with glooming supplies.

According to the Population from Registration Recorded by Age Group and Sex, Whole Kingdom: 2005-2014 of Department of Provincial Administration, Ministry Interior (2014), there are about 9.4 million Thai people at the age of 15-24 in

the country. Consequently, the estimation of the young people population in Thailand for 2016, which is 2 year later from the recording year, would be about 10 million people and not exceed 20 million people referred to the trend occurred within the 10 year passed in the record.

$$n = \frac{N}{1 + N * (e)^2}$$

n = required sample size

N = the population size

e =  the acceptable sampling error

95% confidence level and p = 0.5 are assumed

**Figure 3.1 Formula for required sample size by Taro Yamane (1967)**

To capture the optimal number of respondents, this research refers to Yamane's formula for sample size determination shown above. When the maximum estimation of young thai people in 2016 are at the number of 20 million as mentioned, optimal number of sample size for the research will be aimed at 400 people according

$$n = \frac{N}{1 + 20,000,00 * (0.05)^2}$$

$$n = \quad 399.9920$$

to the demonstration below.

n = required sample size

N = the population size

e =  the acceptable sampling error

95% confidence level and p = 0.5 are assumed

## 3.3 Data Collection

After the questionnaire is fully developed, both online and offline forms were passed along respondents who reach the requirement stated earlier. 194 online forms creating on Google Form's platform and 300 offline forms are distributed within a week starting from 13th June 2016 but 410 of them or about 83 percent of the total questionnaire were returned. Snowball sampling technique which searches the respondents from the previous ones. As mentioned by Vogt (1999), Snowball technique could be simply defined as a technique for finding research subjects. One of subject gives the researcher the name of another subject, who in turn provides the name of a third, and so on. Since respondents are specified with the age range, this technique allows the researcher to distribute the questionnaire more conveniently and accurately. In terms of offline method, the technique is also used for questionnaire distributor selection which possible high school and university instructors in any fields in Bangkok are initiatively contacted before passing the questionnaires along their students with convenience sampling technique. The offline forms of questionnaire which the respondents do not meet the age requirement are finally extracted before data analysis. The following are the high schools and universities where students were passed the questionnaires along:

1. Chulalongkorn University
2. Chulalongkorn University Demonstration Secondary School
3. Debsirin School
4. Dhurakij Pundit University
5. Mahidol University
6. Rajamangala University of Technology Krungthep
7. Rajamangala University of Technology Thanyaburi
8. Silpakorn University
9. Srinakharinwirot University
10. The demonstration School of Nakhonpathom Rajabhat University
11. Triamudomsuksa School

# CHAPTER IV
# FINDINGS

The data analysis in this chapter represents the information from 410 respondents who are defined as young people at their age and also studying in high school or university in Bangkok. In the first section, however, the result on demographic profile and general fashion product purchase behaviour will be provided. Subsequently, Explanatory Factor Analysis (EFA) is used to analyse the proposed constructs on how reasonable they are grouped as factors. After the reduction and summarisation of the variables, multiple linear regression is then used to test each hypothesis on how strong the relationships between the factors and eco-fashion product purchase intention are.

## 4.1 Result and analysis

### 4.1.1 Demographic information

**Table 4.1 Demographic profile of the respondents**

| Demographic Information | | Number of respondents | Percentage (%) |
|---|---|---|---|
| Age | 15 years old | 164 | 40.0 |
| | 16 years old | 55 | 13.4 |
| | 17 years old | 41 | 10.0 |
| | 18 years old | 16 | 3.9 |
| | 19 years old | 35 | 8.5 |
| | 20 years old | 17 | 4.1 |

**Table 4.1 Demographic profile of the respondents (cont.)**

| Demographic Information | | Number of respondents | Percentage (%) |
|---|---|---|---|
| Age | 21 years old | 24 | 5.9 |
| | 22 years old | 20 | 4.9 |
| | 23 years old | 19 | 4.6 |
| | 24 years old | 19 | 4.6 |
| | Total | 410 | 100.0 |
| Gender | Female | 281 | 68.5 |
| | Male | 129 | 31.5 |
| | Total | 410 | 100.0 |
| Education level | Junior high school | 92 | 22.4 |
| | Senior high school | 182 | 44.4 |
| | Bachelor's degree | 129 | 31.5 |
| | Master's degree | 7 | 1.7 |
| | Total | 410 | 100.0 |

Since the research aims to survey on the topic among the group of people solely in an age range which is between 15-24 years old, people in this age group are collected as much as possible in order to reach the number of required sample size. Also, to strictly specify the age of respondents in the snowball sampling method could deter and delay the process which must be primarily concerned. Therefore, the proportion among people of each age could not equally adjusted. According to Table 4.1, the majority which is counted as 40 percent are the respondents in the age of 15 years old. However, the surveys are distributed to respondents in all the ages indicated in the research scope. As expected, they are studying and the surveys were mainly done by high school students which 44.4 percent are in senior level according to their age of 15. In term of gender, female respondents are most of the total which could be calculated as 68.5 percent.

**4.1.2  General purchasing behaviour information**

**Table 4.2 General purchasing behaviour information of the respondents**

| Purchasing Behaviour | | Number of respondents | Percentage (%) |
|---|---|---|---|
| Monthly expenditure | Food | 208 | 50.7 |
| | Cothoes | 50 | 12.2 |
| | Tuition fees | 19 | 4.6 |
| | Book/ educational equipments | 66 | 16.1 |
| | Entertainment | 51 | 12.4 |
| | Residential rent | 7 | 1.7 |
| | Call fees | 2 | 0.5 |
| | Others | 7 | 1.7 |
| | Total | 410 | 100.0 |

In terms of expenditure, the respondents, who represent the group of young people, about 50.7 percent, undoubtedly spend most of their money on food since it is the fundamental need of human. Furthermore, the rest of result are in relation to the previous research of Saimek (2009). Young Thai people allocate their expenditure considering about daily necessities. Consequently, a number of respondents also monthly purchase a lot of educational products or school supplies (16.1 percent of the total respondents) and clothes (12.2 percent of the total respondents). However, there is also some difference since recreational products or spending on entertainment having found an significant increase compared to the past (12.4 percent of the total respondents). In conclusion, Food as a daily necessity, educational products and entertainment are the top-three expenditure of young consumers in 2016, respectively.

**Table 4.3 Fashion product purchasing behaviour information of the respondents**

| Fashion purchasing behaviour | | Number of respondents | Percentage (%) |
|---|---|---|---|
| Frequency of fashion product purchase | Never (parental responsibility) | 121 | 29.5 |
| | Once a month | 143 | 34.9 |
| | 2-3 times a month | 122 | 29.8 |
| | Once a week | 14 | 3.4 |
| | More than once a week | 10 | 2.4 |
| | Total | 410 | 100.0 |
| Preference on shopping companion | Alone | 78 | 19.0 |
| | Friends | 89 | 21.7 |
| | Parents | 207 | 50.5 |
| | Siblings | 33 | 8.0 |
| | Others | 3 | 0.7 |
| | Total | 410 | 100.0 |

Refer to the previous data table, as young people allocate their expenditure depending on daily necessities, spending on fashion products compared to other educational and reading relevances could be in smaller amount. In relation, Table 4.3 shows that more than 90 percent of young people participate in fashion product shopping not exceeding 3 times a month and about 30 percent from the numbers have never done it themselves. Reasonably, in terms of shopping companion preference, most people in the age range counted as about 50 percent of the respondents prefer shopping with their parents to others. Anyway, the other major two are 'friends' and 'alone' respectively.

**Table 4.4 The respondents' fashion product purchase important criteria**

| $Criteria Frequencies | | | | |
|---|---|---|---|---|
| | | Responses | | Percent of Cases |
| | | N | Percent | |
| Criteria questions | What are the criteria you concern while you buy apparel? - additional benefits | 84 | 7.4% | 20.5% |
| | What are the criteria you concern while you buy apparel? - environmental impacts | 14 | 1.2% | 3.4% |
| | What are the criteria you concern while you buy apparel? - favorite design | 326 | 28.6% | 79.5% |
| | What are the criteria you concern while you buy apparel? - price | 283 | 24.8% | 69.0% |
| | What are the criteria you concern while you buy apparel? - promotion | 80 | 7.0% | 19.5% |
| | What are the criteria you concern while you buy apparel? - product quality | 263 | 23.1% | 64.1% |
| | What are the criteria you concern while you buy apparel? - trend | 88 | 7.7% | 21.5% |
| | What are the criteria you concern while you buy apparel? - other | 1 | .1% | .2% |
| Total | | 1139 | 100.0% | 277.8% |

Table 4.4 refers to the respondents' criteria for fashion product selection which multiple responses are allowed for this question. As the result, most of them or about 80 percent concordantly place an importance on the design of fashion products when they make purchases. Respectively, price is also one of the major concerns in their fashion product purchase decision since 69 percent of all the respondents marked on the issue in the questionnaires. In the third place, about 65 percent of the same people group consider product quality as the other important criteria. However, consideration of environmental impacts, in which this research is interested, are recalled by only approximate 3 percent of all the respondents during fashion product purchase decision making.

### 4.1.3 Factor analysis

**Table 4.5** Total Variance Explained

| Total Variance Explained | | | | | | |
|---|---|---|---|---|---|---|
| | Initial Eigenvalues | | | Rotation Sums of Squared Loadings | | |
| Component | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 7.446 | 27.579 | 27.579 | 4.052 | 15.009 | 15.009 |
| 2 | 4.532 | 16.785 | 44.364 | 3.241 | 12.003 | 27.012 |
| 3 | 1.878 | 6.954 | 51.318 | 2.898 | 10.733 | 37.745 |
| 4 | 1.750 | 6.480 | 57.799 | 2.833 | 10.494 | 48.239 |
| 5 | 1.300 | 4.813 | 62.612 | 2.661 | 9.856 | 58.095 |
| 6 | 1.152 | 4.267 | 66.879 | 2.372 | 8.784 | 66.879 |
| 7 | .904 | 3.349 | 70.228 | | | |
| 8 | .769 | 2.847 | 73.075 | | | |
| 9 | .715 | 2.650 | 75.724 | | | |
| 10 | .700 | 2.593 | 78.317 | | | |
| 11 | .595 | 2.204 | 80.521 | | | |
| 12 | .568 | 2.104 | 82.626 | | | |
| 13 | .514 | 1.904 | 84.529 | | | |
| 14 | .505 | 1.870 | 86.399 | | | |

**Table 4.5 Total Variance Explained (cont.)**

| | | | | | | |
|---|---|---|---|---|---|---|
| **Total Variance Explained** | | | | | | |
| Component | Initial Eigenvalues | | | Rotation Sums of Squared Loadings | | |
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 15 | .433 | 1.604 | 88.004 | | | |
| 16 | .395 | 1.465 | 89.469 | | | |
| 17 | .373 | 1.382 | 90.850 | | | |
| 18 | .352 | 1.303 | 92.154 | | | |
| 19 | .332 | 1.230 | 93.383 | | | |
| 20 | .298 | 1.103 | 94.486 | | | |
| 21 | .283 | 1.049 | 95.535 | | | |
| 22 | .278 | 1.028 | 96.563 | | | |
| 23 | .242 | .897 | 97.461 | | | |
| 24 | .225 | .833 | 98.293 | | | |
| 25 | .172 | .637 | 98.930 | | | |
| 26 | .146 | .542 | 99.472 | | | |
| 27 | .143 | .528 | 100.000 | | | |

As the eigenvalues should be higher than 1 and cumulative percent also should represent more than 60 percent of the all constructs (Field, 2005; Shannon, 2016), there are possible 6 components meeting the requirements. Seemingly, the first 6 numbers have the eigenvalues exceeding 1 and cumulative percent at 66.8 percent.
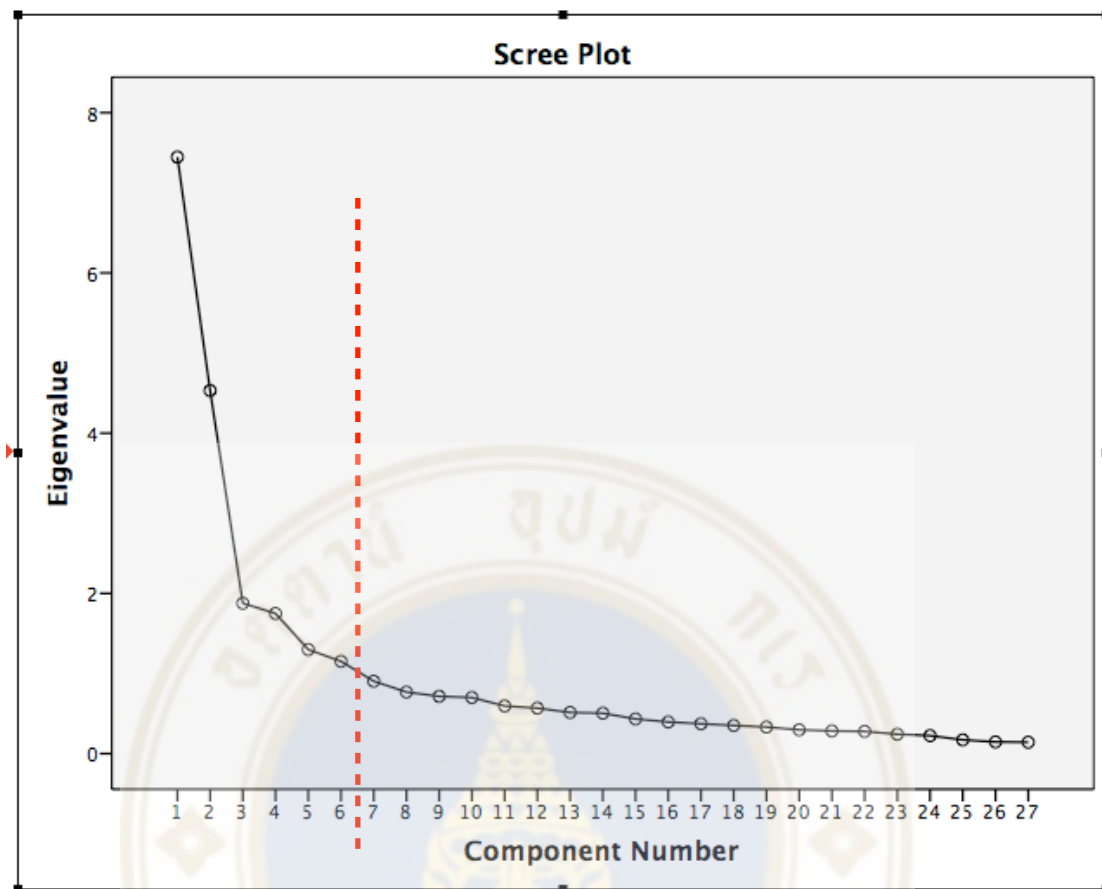
**Figure 4.1 Scree Plot**

       Looking for a clear separation in the plot that shows the tail of the graph becoming horizontal is how to find possible factors to measure for the research (Shannon, 2016). Consequently, as the separation noticed between component 6 and 7, the research may have 6 potential factors reasonable for the topic measurement.

**Table 4.6 Rotated Component Matrix**

| | Component | | | | | |
|---|---|---|---|---|---|---|
| **Rotated Component Matrixa** | 1 | 2 | 3 | 4 | 5 | 6 |
| How often do you share information about environmentally-friendly products with you friends | .881 | | | | | |
| How much do you discuss with your friends about environmentally-friendly products | .879 | | | | | |
| How much do you discuss with your friends about environmental issue | .830 | | Social influence | | | |
| How much do you learn about environmentally-friendly products from your friends | .807 | | | | | |
| How much do learn about environmental issue from your friends | .778 | | | | | |

According to 4.6, this part show 5 constructs are formed together refer to the factor loading alignment. The meaning of each construct could be still named as 'Social influence' as suggested in Chapter III.

**Table 4.6 Rotated Component Matrix (cont.)**

| | Component | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| It is my duties to reserve the environment and natural resource in my country | | .793 | | | | |
| How willing are you to take up responsibility to protect the environment in Thailand | | .779 | | | | |
| My individual green action can supportively contribute environmental protection | | .776 | | Perceived environmental responsibility | | |
| I should be responsible for protecting the environment in Thailand | | .677 | | | | |
| How much responsibility do you have in protecting the environment in Thailand | | .550 | | | | |

According to 4.6, this part show 5 constructs are formed together refer to the factor loading alignment. The meaning of each construct could be still named as 'Perceived environmental responsibility' as suggested in Chapter III.

**Table 4.6 Rotated Component Matrix (cont.)**

| | Component | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Supporting environmental protection makes me special | | | .784 | | | |
| Purchasing products with green labels make me feel smarter | | | .766 | | | |
| Others would appreciate my green purchases as admirable actions | | | .694 | | | |
| Supporting environmental protection makes me more socially attractive | | | .680 | | | |
| I will be perceived by others as "out-dated" if I do not support environmental protection | | | .574 | | | |

**Concern for self-image**

According to 4.6, this part show 5 constructs are formed together refer to the factor loading alignment. The meaning of each construct could be still named as 'Concern for self-image' as suggested in Chapter III.

**Table 4.6 Rotated Component Matrix (cont.)**

| | Component | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| I explicitly know what environmentally-friendly products are about | | | | .751 | | |
| I know how environmentally-friendly products partakes in reducing environmental problems | | | | .746 | | |
| Education have an influence on my green practices | | | | .684 | | |
| My knowledge of environmental problems strongly push me to make green purchase | | | | .620 | | |
| Recycled materials is the practice of environmental reserve | | | | .599 | | |

According to 4.6, this part show 5 constructs are formed together refer to the factor loading alignment. The meaning of each construct could be still named as 'Environmental knowledge' as suggested in Chapter III.

**Table 4.6 Rotated Component Matrix (cont.)**

| | Component | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Thailand's environmental problems are threatening the reputation of Thailand | | | | | .837 | |
| I think Thailand's environmental problems are getting worse | | | | Environmental concern | .813 | |
| Thailand's environmental problems causes negative effects on our health | | | | | .786 | |
| I am worried about the worsening of the quality of Thailand's environment | | | | | .569 | |
| Environmental protection works are a waste of money | | | | | | .875 |
| I think environmental protection is meaningless | | | | Environmental attitude | | .870 |
| Environmental issues are none of my business | | | | | | .776 |

This part of Table 4.6 demonstrated that environmental concern and environmental attitude are separately grouped with the same constructs. However, some of constructs were cut off in the processes of factor analysis since their contribution level numbers are insignificant (Hair et al., 2006).

After data reduction considering from scores of factor loadings under 0.4, cross loading and mismatch meaning (Shannon, 2016) the new data summarisation show the existing constructs still grouped in the same categories. According to the Rotated Component Matrix number illustrated above there are 6 factors possible to measure further which are:

1. Concern for self-image: the constructs in the factor represent the way people participate in environmental actions actually considering about their personal image to others in the society such as being more special, smarter or admirable. In fact, they would like to become more socially attractive.

2. Enviromental attitude: the constructs are grouped with the same characteristic which is about positive acknowledgement on the importance of environmental reserve.

3. Environmental concern: the constructs show the level of emotional attachment among respondents and their awareness towards such environmental problems.

4. Environmental knowledge: the constructs explain about how much knowledge of green practices the respondents have or how much they know about brands and products participating in such green practices.

5. Perceived environmental responsibility: the constructs consisted of the factor refer to the personal believe of individuals which each of their actions could positively affects environment reserve. Consequently, they decided to take those actions as their duties.

6. Social influence: the factor is about how the respondents learn the environmental problems from others in society. Anyway, the existing

constructs grouped as a factor is solely related to sharing opinion and knowledge on environmental products and environmental issues with friends.

Therefore, the research are still able to use the hypothesis suggested in Chapter III

### 4.1.4 Multiple Regression Analysis

**Table 4.7 ANOVA result from running multiple linear regression**

| ANOVA | | | | | | |
|-------|---|---|---|---|---|---|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 193.395 | 6 | 32.232 | 45.054 | .000b |
| | Residual | 288.315 | 403 | .715 | | |
| | Total | 481.710 | 409 | | | |
| a. Dependent Variable: For the next apparel purchase, are you going to buy eco-fashion products since you know the impact of the actions | | | | | | |
| b. Predictors: (Constant), ecoattitude, Selfimageconcern, ecoconcern, Socialinfluence, PercievedECOresponsibility, ecoknowledge | | | | | | |

As using the 6 proposed factors as predictors (Independent variables) and eco-fashion purchasing intention as dependent variables, Table 4.7 showing the ANOVA result which demonstrated the significant level of those 6 factors at 0.00 as any values less than 0.05 are typically considered significant. Consequently, the result implies that Concern for self-image, environmental attitude, environmental concern, environmental knowledge, perceived environmental responsibility and social influence are acceptable as the influential factors towards eco-fashion product purchase intention.

**Table 4.8 Model Summary from running multiple linear regression**

| | | | | Std. Error of the |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Estimate |
| 1 | .634a | .401 | .393 | .846 |

**Model Summary**

a. Predictors: (Constant), ecoattitude, Selfimageconcern, ecoconcern, Socialinfluence, PercievedECOresponsibility, ecoknowledge

As Adjusted R Square's value was 0.393, the result indicates that the dependent variable (eco-fashion product purchase intention) can be explained by the independent variables (self-image, environmental attitude, environmental concern, environmental knowledge, perceived environmental responsibility and social influence) at 39.3 percent.

**Table 4.9 Coefficient Number from running multiple linear regression**

**Coefficients**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | .243 | .364 | | .667 | .505 |
| | SocialInfluence | .347 | .043 | .366 | 8.006 | .000 |
| | PercievedEcoResponsibility | .175 | .072 | .128 | 2.430 | .016 |
| | SelfimageConcern | .195 | .057 | .161 | 3.425 | .001 |
| | Ecoknowledge | .228 | .072 | .167 | 3.160 | .002 |
| | Ecoconcern | .052 | .059 | .039 | .884 | .377 |
| | Ecoattitude | -.038 | .048 | -.035 | -.792 | .429 |

a. Dependent Variable: For the next apparel purchase, are you going to buy eco-fashion products since you know the impact of the actions

Refer to Table 4.9, 4 independent variables are found to have positive relationship towards dependent variable since those independent variables have the level of significance less than 0.05 (Sinn, 2016). To be more explained, the result illustrated that the relationship between independent variables (social Influence, perceived environmental responsibility, concern for self-image, environmental knowledge, environmental concern and environmental attitude) and dependent variable (eco-fashion product purchase intention) are reliable and can be used to make predictions which are:

**Table 4.10 Hypotheses summary**

| Independent variables | Independent variables | Sig. | Rusults |
|---|---|---|---|
| Concern for self-image | **H1:** Young consumers with concern for their self-image will have stronger intention to become involved in eco-fashion purchasing. | 0.001 | Accepted |
| Environmental attitude | **H2:** Young consumers with positive environmental attitudes will have stronger intention to become involved in eco-fashion purchasing. | 0.377 | Rejected |
| Environmnetal concern | **H3**: Young consumers with positive environmental concern will have stronger intention to become involved in eco-fashion purchasing. | 0.429 | Rejected |
| Environmental knowledge | **H4:** Young consumers with positive environmental knowledge will have stronger intention to become involved in eco-fashion purchasing. | 0.002 | Accepted |

**Table 4.10 Hypothesis summary (cont.)**

| Independent variables | Independent variables | Sig. | Rusults |
|---|---|---|---|
| Perceived environmental responsibility | **H5:** Young consumers who perceive their environmental responsibility will have stronger intention to become involved in eco-fashion purchasing. | 0.016 | Accepted |
| Social Influence | **H6:** Social influence will positively affect young consumers' stronger intention to become involved in eco-fashion purchasing. | 0.000 | Accepted |

## 4.2 Discussion

### 4.2.1 Concern for self-image (Sig. = 0.001)

Concern for self-image, first, is one of the predictors statistically significant as shown in Table 4.9. Therefore, it should be considered as an influential factor towards eco-fashion product purchase decision among young Thai consumers. To be explained, young Thai consumers make their purchases on those products since they believe that the actions will positively enhance their self-images to others such as making them feel smarter, special and socially attractive. The result is seemingly related to the nature of young people reviewed in Chapter II. Specifically, to describe more with Thai behaviour, Thai consumers tend to concern with their face and status for their shopping (Shannon and Mandhachitara, 2008). Undoubtedly, as Lee (2008) also discussed about this factor, adopting green practices carry symbolic functions among young people. Compared to previous researches, this research result is also correlative with Lee's research in which the relationship between young consumers in Hong Kong and green purchases are explained.

### 4.2.2 Environmental knowledge (Sig. = 0.002)

According to The literacy rate of Thai youth (15-24) in 2009-2013 recorded in Unicef's statistics (2015), about 97 percent of citizens among the ages are literate. Since education are confirmed to have an influence on environmental problem recognition and green practices, the statistics should imply that they are likely to make eco-fashion product purchases. Fortunately, this research shows the correlative result on this topic which environmental knowledge could be statistically explained significant towards the dependent variable.

Therefore, educating young Thai consumer on environmental issues and providing enough and clear information about environmental impacts of products, for example, plausibly attract the generation more to buy eco-fashion products or willingly participate in environmental reserve since they know the actions would positively reduce the impacts of environmental degradation. In addition, the more the brands can efficiently and broadly communicate what and how they participate in green practices so the brands are well recognised by customers, the more those brands can sell the eco-fashion products.

Reasonably, the result from this study also does accord with the previous researches as environmental knowledge is an important background factor facilitating green purchase intention of young customers (Promotosh and Sajedul, 2011; Kanchanapibul et al., 2013) used to evaluate the products (Suki, 2013), translating their concerns to actual sustainable purchases (Shen, 2012).

### 4.2.3 Perceived environmental responsibility (Sig. = 0.016)

According to the statistic illustration above, the research can imply that young consumers who can recognise their duties to the environment and also believe in their individual green actions are likely to buy eco-fashion products. Since they realise how their green actions contribute to environmental protection, they eventually think that eco-fashion products should be supported. Further, when the result is compared to the previous researches in which perceived environmental responsibility

is also suggested as a potential predictor towards green product purchase, at last, the variable is statistically explained significant (Lee, 2008; Kumar and Ghodeswar, 2015). The study on Hong Kong adolescent consumers' green product purchase of Kaman also referred to the theory of efficacy expectation (Bandura, 1977), which it explained that people will process, weight and use their sources of information in regard to their abilities and outcomes of a behaviour to guide their behaviour. Consequently, since the results between these two studies are the same, young Thai consumer behaviour on eco-fashion product purchase is reasonably able to described by the theory mentioned as well.

### 4.2.4 Social influence (Sig. = 0.000)

Refer to the statistic number, Social influence is the most influential factors towards eco-fashion product purchase among young Thai consumers. Seemingly, young Thai consumers are likely to buy eco-fashion products in regard to their peers' opinions. The more they share and learn information about environmental issues and green products together, the more they is plausibly going to buy the products. Also, in relation to Thai culture, the result could be explained by Thai collectivism, in which people are believed to:

1. consider about other people for their decisions or actions
2. share either material or non-material resources
3. be susceptible to social influence
4. believe in correspondence of their own outcomes and others
5. concern about their self-image to others and face saving
6. feel involved with other lives
7. subordinate the goals of a group (Hui and Triandis, 1986)

Since Thailand are described as highly collectivist country according to the level of individualism at 20 (The Hofstede Centre's website, 2016), Thai people suppose to have the characteristics mentioned above which their purchase decisions could be influenced by others. Conspicuously, the result of this study, which peer-

based reference groups are able to dominate young Thai consumers eco-fashion product decision, is anyways reasonable. In addition, the factor is also statistically explained significant in the research of Lee (2008), which is mainly mentioned in this study.

### 4.2.5 Other Aspects

However, there is a difference between Thai and Hong Kong young consumer in green product purchase decision (as eco-fashion is described as a type of green products). According to the research of Lee (2008), environmental concern, which refers to the emotional level of individual involvement in environmental issues, is explained as a key factor. On the contrary, the factor appears to have less influence on Thai youths. Plausibly, the showing outcome implies that young Thai consumers have not still truly recognised or less concerned about their current environmental problems in the country compared to Hong Kong. Besides, it is possible that young Thai consumers tremendously value their benefits (such as having attractive or smarter image) to others rather than social benefits from reserving the environment since concern for self-image is found to be more dominant factor in this study.

# CHAPTER V
# CONCLUSION AND LIMITATION

This research aims to study young Thai consumer's intention of purchasing eco-fashion products. At first, there were 6 hypotheses proposed, which predicted that 6 variables will have strong relationships towards the dependent variable suggested. Those hypotheses were tested from the quantitative data collected among Thai youths (15-24 years old) who are studying in Bangkok and surrounding areas such as Nakhonpathom and Nonthaburi. However, along the processes of Factor Analysis and Multiple Linear Regression, only 4 factors, which are concern for self-image, environmental knowledge, perceived environmental responsibility and social influence (peer-based reference groups), were found to have the relevances. Consequently, to answer the research question, which attempts to find the most influential factors affecting young Thai consumer eco-fashion product purchase intention, the research manages to prioritise the factors according to their significance level (De Maeyer, 2016) in the coefficient table 4.9:

1.  Social influence (peer-based reference groups) (Sig. = 0.000)
2.  Concern for self-image (Sig. = 0.001)
3.  Environmental knowledge (Sig. = 0.002)
4.  Perceived environmental responsibility (Sig. = 0.016)

Then, for the other two hypotheses suggesting environmental attitude and environmental concern as predictors, those were eventually rejected. However, the result discovered among Thai youths is a bit different from the research in Hong Kong of Kaman (2008) from which the initial ideas and major research components have been mentioned. Young Thai consumers may make their eco-fashion product purchases as part of participating green practices because the ethical consumptions deliver them socially attractive images. The youths plausibly perform green actions as

the way of self-fulfilment. Unlikely, they indeed concern the current situation of environmental problems in Thailand. Also, probably, they have not still recognised the seriousness of the environmental issues at the moment compared to Hong Kong, where environmental concern is also key influencing factor.

## 5.1 Recommendation and Practical Implications

Since Social influence (peer-based reference group) is the most influential factors towards eco-fashion among young Thai consumers, brand communications and marketing activities should encourage the young customers to talk about the environmental issues and green products so that they can share their opinions together. Aforementioned, the more they share and learn about environmental problems and green products, the more they are going to buy eco-fashion products. Therefore, going viral technique would be useful at this stage.

However, in order to spread the message more efficiently, media channels be carefully selective so that it is able to match with the customers' media usage and behaviour. For examples, the communications and marketing campaigns should approach Thai youths mainly on social media such as Facebook, Instagram or Line, where most of them are familiarly gathering around to update current happenings, news, their interests and then share the information together with their friends and acquaintances.

Beside the media utilisation, contents should be also relevant to their values and interests. Since the research empirically found that Thai youths make their eco-fashion purchases as a way to participate green practices in order to positively enhance their self-image to others, the messages in any communications and marketing campaigns should be in connection with this fulfilment. For example, the campaign could encourage young Thai consumers to purchase eco-fashion products by promoting the benefits of becoming smarter, or more socially attractive because the

ethical consumption is typically such an admirable action in other people's points of view in this age group.

However, knowledge on environmental issues are also an important factor which could encourage Thai youths to buy eco-fashion products. Consequently, the fashion brands manufacturing green apparel or participating in green practices through their supply chains should work on educating this age group about the effects of environmental problems and practical solutions. The fashion brands may work closely the governments in order to promote green practices or sustainable living from making young generation aware of the seriousness of environmental issues.

Also, provide clear information of the green products and how the products have an impact on reducing environmental degradation is a way to provide environmental knowledge to customers. Seemingly, information tags and advertisement seem vital for the implementations. The green fashion brands is able to show that a clothing is made from 100% of organic cotton which could help reduce the use of water in planting, for example. Furthermore, regularly advertising what and how the brands participate in green practices could make young consumers recognise the brands and persuade them to make their purchases on eco-fashion products more.

Moreover, to explicitly provide young customers the impacts of each product purchase might not only promote environmental knowledge to them, but also support them to have perceived environmental responsibility. In relation, since consumers who perceive their environmental responsibility believe that they can individually contribute to environmental protection by adopting green practices at individual levels (Kumar and Ghodeswar, 2015). Also, the statement is quite in relation to the theory of efficacy expectation (Bandura, 1977), which it explained that people will process, weight and use their sources of information in regard to their abilities and outcomes of a behaviour to guide their behaviour. Since young consumers are able to know how much their individual green purchases contribute to environmental reserve from information tag or brand advertisement as mentioned, they would be more confident to support the actions as well.

Nevertheless, the other aspects discovered during the study should be also considered. Refer to the Table 4.4, the most important criteria when young consumers make their fashion products purchases are design, price and quality, respectively. Therefore, in order to increase opportunity for green fashion, the brands should also work hard on customers' insight and their preferences. Plausibly, creativity could play a major role in product development. In relation, having great design or participating in creativity might also be able to reach wider range of customers. According to the research on experiential meanings of consumption and sustainability in Turkey by Ger (1999), the way people get involved with some ecological practices such as metro, pressured cookers, recycling, and reusing package have been deeply rooted that these behaviour associated with westernisation, progress, fun, and creativity instead of saving nature.

About the criterion on price, although young consumers are able to also consider about the product price themselves, the brands can also think of the companions whom young consumers often go with as well in order to create the right marking strategies. The result of this study found that consumers among this age group prefer shopping with their parents to others. Undoubtedly, it is possible that the parents would partly partake in their product decisions. Therefore, the promotion should also rely on the parents' behaviour somehow. For example, sale promotions for youth's clothing would become more effective during paydays when parents could spend for their children.

Simultaneously, the brands should also ensure young consumer that the product quality can be reliable because they also concern over this issue. Then, material selection is an important part of fashion product manufacturing. Even though the fashion products might be made from recycled materials, the brand should also be responsible for those products' performance such as the product lifetime to be equal to other normal fashion products. Beside the processes along the production, clear information of the products, its usages and good brand communication might be able to establish trust in eco-fashion products among young consumers, anyway.

## 5.2 Limitation and Future Research

To accomplish the study, time is considered as a major constraint of the researcher. Accordingly, this research skipped the process of pilot test so the questionnaire could not be rechecked the ability to be easily understandable in terms of language usage, structure and process complexity since the questionnaire was also translated into Thai. From the gap, the questionnaire launched to collect data among young people could lead the respondents to confusion and wrong-purposed answers. Besides, this study aims to mainly target young people who are studying in Bangkok and surrounding areas since education are predicted to have strong relationship between the environmental issues and respondents' understanding. Therefore, the result might not be able to represent the whole Thai populations' opinions and behaviours. Furthermore, quantitative approach would deter the respondents to give their real insights. Since the questionnaire is related to ethical consumption, it would be easy for the respondents to provide the researcher their socially attractive answers.

Consequently, to make future researches will be more precise, these processes are recommended to consider accomplishing:

1. Pilot test should be performed with a real age group of respondents in order to avoid unnecessary confusion in language usage which could further cause imprecise responses.

2. Instead of having solely respondents from Bangkok, covering a number of the cities around Thailand could deliver more understanding on the issues from various young consumers' opinions. Accordingly, the data could become more truly representative of young Thai consumers.

3. Qualitative approach should be considered as an additional data collection. With the benefit of being face-to-face, respondents' insights would be more extensive compared to quantitative survey which the answers are somehow limited by choices strictly offered.

# REFERRENCES

Althaus, S. (1996). Opinion polls, information effects, and political equality: Exploring ideological biases in collective opinion, *Political Communication*, 13, 3-21.

Albyrak, T., Aksoy, S., Caber, M. (2013). The effect of environmental concern and scepticism on green purchase behaviour. Marketing Intelligence and Planing, 31(1), 27-39.

Allwood, C.K., Laursen, S.E., DeRodriguez, C.M., Bocken, N.M.P (2006). *Well Dressed? The Present and Future Sustainability of Clothing and Textiles in the Unites Kingdom*, Cambridge: University of Cambridge, Institute for Manufacturing.

Anson, R. (2012). Can the shift of textile and clothing production to Asia be reversed?. Textile Outlook International, 19, 4-9.

Ayidiya, S.A. & McClendon, M.J. (1990). Response effects in mail surveys. Public Opinion Quarterly, 54, 229-247.

Battaglia M., Testa, F., Bianchi, L., Irado, F., Frey, M. (2014). Corporate social responsibility and competitiveness within SMEs of the fashion industry: Evidence from Italy and France. *Sustainability,* 6(2), 872–893.

Bandura, A. (1997). Self-efficacy: towards a unifying theory of behavioural change, *Psychological Review*, 84(2), 191-215.

Bearden, W.O. and Rose, R.L. (1990). Attention to social comparison information: an individual difference factor affecting consumer conformity. Journal of Consumer Research, 16(4), 461-471.

Bonini, S. & Oppenheim, J. (2008). Helping green products grow. *The McKinsey Quarterly*. Retrieved from http://www.data360.org/pdf/20081029174901.08-10-29%20McKinley%20Green%20Perception.pdf

Carrigan, M., Szmigin, I., Wright, J. (2004). Shopping for a better world? An interpretive study of poential for ethical consumption within the older market. *Journal of Consumer Marketing*, 21(6), 401-417.

Chan, H.K., Wang, X., White, G., Yip, N. (2013). An extent fuzzy-AHP approach for the evaluation of green products design. *IEEE Transactions on Engineering Management*, 60(2), 327-339.

Chan T.Y. & Wong C.W.Y. (2012). The consumption side of sustainable fashion supply chain. *Journal of Fashion Marketing and Management: An International Journal*, 16(2), 193-215.

Chen, H. & Burns, D.L. (2006). Environmental analysis of textile products. *Clothing and Textiles Research Journal, 24(3),* 248–261.

Claudio, L. (2007). Waste couture: environmental impact of the clothing industry. *Environmental Health Perspectives,* 115(6), 448-454.

Converse, J.M. (1976). Predicting No Opinon in the polls. *Public Opinion Quarterly*, 40, 515-530.

Cote, R. (2014, 17 August 2014). 7 things teens buy the most. [Weblog]. Retrieved 19 May 2016, from http://www.therichest.com/rich-list/most-popular/7-things-most-often-bought-by-teens/?view=all

Danjelico, R. & Pujari, D. (2010). Mainstream green product innovation: what and how companies integrate environmental sustainability. *Journal of Business Ethics*, 95(3), 471-486.

De Brito, M.P., Carbone, V., Blanquart, C.M. (2008). Towards a sustainable retail fashion supply chain in Europe: Organization and performance. *International Journal of Production Economics,* 114(2), 534-553.

De Maeyer, P. (2016). *MGMG532 Marketing Research.* Bangkok, Thailand: College of Management, Mahidol Univerisity.

Department of Provincial Administration, Ministry Interior, Thailand (2014). The Population from Registration Recorded by Age Group and Sex, Whole Kingdom: 2005-2014. Retrieved from http://service.nso.go.th/nso/web/

statseries/tables/00000_Whole_Kingdom/1.2.2.xls, http://service.nso.go.th/nso/web/statseries/statseries01.htm

Faisal, M.N. (2010). Sustainable supply chains: A study of interaction among the enablers. Business Process Management Journal, 16, 508-529.

Field, A. (2005). *Discovering Statistic Using SPSS*. London: Sage.

Fletcher, K. (2008). *Sustainable fashion and clothing: Design journeys*, Earthscan: Malt2a.

Francis, J.D. & Busch, L. (1975). What we now know about "I don't know". *Public Opinion Quarterly*, 39, 207-218.

Fulton, K. & Lee, S.E., (2010), An overview of sustainability in the fashion industry. *The interactional Journal of Environmental, Culture, Economic and Social Sustainability*, 6(1), 1-14.

Gadenne, D., Sharma, B., Kerr, D., Smith, T. (2011). The influence of consumers' environmental beliefs and attitudes on energy saving behaviour. *Energy Policy*, 39(12), 7684-7694.

Gam, H.J. & Banning, J. (2011). Addressing sustainable apparel design challenges with problem-based learning. *Clothing and Textiles Research Journal*, 29(3), 202-219.

Ger, G. (1999). Experiential meanings of consumption and sustainability in Turkey. Advances in Consumer Research, 26, 276-280. Retrieved from http://acrwebsite.org/volumes/8262/volumes/v26/NA-26

Gilgen, A.R. & Barnholtz, A. (1992). The BEM sex-role inventory as an index of response tendencies to scales in Likert format. *Psychological Report*, 71, 796-798.

Greer, L. (2015). Remove toxic chemicals and fabrics from fashion's supply chian. [article]. Retrieved from https://www.businessoffashion.com/community/voices/discussions/can-fashion-industry-become-sustainable/remove-toxic-chemicals-fabrics-fashions-supply-chain

Hair, J.F.Jr., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L. (2006). *Multivariate Data Analysis*. London: Prentice-Hall.

Heaney, J. (2006). Generation X and Y's internet banking usage in Australia. J*ournal of Financial Services Marketing*, 11(3), 196-210.

Hill J. & Lee H.H. (2012). Young generation Y consumers' perceptions of sustainability in the apparel industry. Journal of Fashion, 16(4), 477-491.

Hume, M. (2010). Compassion without action: examining the young consumers consumption and attitude to sustainable consumption. *Journal of World Business*, 45(4), 385-394.

H&M (2015) *H&M Conscious Actions Sustainability Report 2015.* Retrieved from H&M website: http://sustainability.hm.com/content/dam/hm/about/ documents/masterlanguage/CSR/2015%20Sustainability%20report/ HM_SustainabilityReport_2015_final_FullReport.pdf

Jang, Y., Kim, W., Bonn, M., (2011). Generation Y consumers' selection attributes and behavioural intentions concerning green restaurants. *International Journal of Hospitality Management*, 30(4), 803-811.

Joergens, C. (2006). Ethical fashion: myth or future trend?. *Journal of Fashion Marketing and Management*, 10(3), 360-371.

Kanchapibul M., Lacka, E., Wang, X., Chan, H.K. (2013). An empirical investigation of green purchase behaviour among the young generation. *Journal of Cleaner Production*, 66, 528-536.

Kaufmann, H.R., Panni, M.F.A.K., Orphanidou, Y. (2012). Factors affecting consumers' green purchasing behaviour: an integrated conceptual framework. *Amfiteatru Economic*, 15(31), 50-69.

Klinefelter, J.P., Tamminga, N.J.N, Naughton, S.P., Engebretson, A.F., Yung, F., Fuhrman, A.J., Berg, J.N. (2011). Taking stock with teens: Spring 2011. *Piper Jaffrey Investment Research.*

Kumar, P. & Ghodeswar B.M. (2015). Factors affecting consumers' green product purchase decision. *Marketing Intelligence and Planning*, 33(3), 330- 347.

Lee, K. (2008). Opportunities for green marketing: young consumers. *Marketing Intelligence and Planning*, 26(6), 573-586.

Lee, K. (2011). The green purchase behavior of Hong Kong young consumers: the role of peer influence, local environmental involvement and concrete environmental knowledge. *Journal of International Consumer Marketing*, 23(1), 21-44.

Liere, K. & Dunlap, R. (1980). The social bases of environmental concern: a review of hypotheses, explanations and empirical evidence. *Public Opinion Quarterly*, 44(2), 181-197.

Manchiraju, S. & Sadachar, A. (2014). Personal values and ethical consumption. *Journal of Fashion Marketing and Management*, 18(3), 357-374.

Matinsons, M.G., So, S.K.K., Tin, C., Wong, D. (1997). Hong Kong and China: emerging markets for environmental products and technologies. *Long Range Planning*, 30(2), 277-290.

Mostafa, M. (2009). Shades of green. A psychographic segmentation of green consumer in Kuwait using self-organizing maps. *Expert Systems With Application*, 36(8), 11030-11038.

Moulds, J. (2015). Can big brands catch up on sustainable fashion?. [article]. Retrieved from http://www.theguardian.com/sustainable-business/sustainable-fashion-blog/2015/mar/24/composting-clothes-sustainable-materials-biodegradable

Nagurney, A. & Yu, M. (2012). Sustainable fashion supply chain management under oligopolistic competition and brand differentiation. *International Journal of Production Economics*, 135(2), 532-540.

Narayan, S. & Krosnick, J.A. (1996). Education moderates some response effects in attitude measurement. *Public Opinion Quarterly*, 60, 58-88.

Newholm, T. & Shaw, D. (2007). Studying the ethical consumer: a review of research. *Journal of Consumer Behaviour,* 6(5), 253-270.

Ochoa, L.M.C. (2011). Will 'Eco-fashion' take off? A survey of potential customers of organic cotton clothes in London. *AD-minister Journal*, 16, 118-131. Retrieved from http://publicaciones.eafit.edu.co/index.php/administer/article/download/188/1644

Oliver, J.D. & Lee, S. (2010). Hybrid car purchase intention: a cross-cultural analysis. *Journal of Consumer Marketing*, 27(2), 96-103.

Park, J. & Ha, S. (2012). Understanding pro-environmental behaviour: a comparison of sustainable consumers and apathetic consumers. *International Journal of Retail and Distribution Management*, 40(5), 388-403.

Pawloski A. (2011). *Sustainable development as a civilizational revolution: A multidisciplinary approach to the challenge of the 21st century.* Boca Raton: CRC Press.

Pinto, D.C., Nique, W.M., Añaña, E.D.S., Herter, M.M. (2011). Green consumer values: how do personal values influence environmentally responsible water consumption?. *International Journal of Consumer Studies*, 35(2), 122-131.

Presser, S. & Schuman, H. (1980). The measurement of middle position in attitude surveys. *Public Opinion Quarterly,* 44, 70-85.

Promotosh, B., & Sajedul I.M. (2011). *Buying green products: A study based on the Theory of Planned Behavior (Master's thesis),* Umeå University, Sweden.

Raaijmakers, Q.A.W., Hoof, A.V., Hart, H., Verbogt, T.F.M.A., Vellebergh, W.A.M. (2000). Adolescents' midpoint responses on Likert-type scale items: neutral or missing values?. International Journal of Public Opinion Research, 12(2), 208-216.

Rinkesh. (2014, 27 June 2014). 15 current environmental problems that our world is facing. [Weblog]. Retrieved 19 May 2016, from http://www.conserve-energy-future.com/15-current-environmental-problems.php

Roberts, J. (1996). Green consumers in the 1990s: profile and implications for advertising. *The Journal of Business Research,* 36(3), 217-231.

Saimek, M. (2009). *Expenditure patterns of Thai adolescent (Unpublished doctoral dissertation),* National Institute of Development Administration, Bangkok.

Schlegelmilch, B.B., Bohlen, G.M., Diamantopoulos, A. (1996). The ink between green purchasing decisions and measures of environmental consciousness, European Journal of Marketing, 30(5), 35-55.

Schumann, H. & Presser, S. (1977). Question wording as independent variable in survey analysis. Sociological Methods and Research, 6, 151-170

Sekaran, U. & Bougie, R. (2009). Research Methods for Business: A Skill Building Approach. USA: John Wiley & Sons, Inc.

Shaffer, D.R. (1994). *Social and Personality Development*. Pacific Groove: Brooks/ Cole Publishing.

Shannon, R. (2016). *New Product Positioning: Presentation handout.* Bangkok: College of Management, Mahidol University.

Shannon R. & Mandhachitara R. (2008). Casual path modelling of grocery shopping in hypermarkets. *Journal of Product & Brand Management*, 17(5), 327-340.

Shaw, D. Hogg, G., Wilson, E., Shui E., Hassan, L. (2006). Fashion victim: the impact of fair trade consumers on clothing choice, *Journal of Strategic Marketing*, 14(14), 427-440.

Shen, B., Wang, Y., Lo, C.K.Y., Shum, M. (2012). The impact of ethical fashion on consumer purchase behavior. *Journal of Fashion Marketing Management: An International Journal.* 16(2), 234–245.

Shen B. (2014). Sustainable Fashion Supply Chain: Lessons from H&M. *Sustainability*, 6(9), 6236-6249.

Shen B., Zheng J., Chow, P., Chow, K. (2014). Perception of fashion sustainability in online community. *The Journal of The Textile Institute*, 105(9), 971-979.

Sinn, J. (2016). SPSS guide: Correlation and Regression. Retrieved from http://faculty.winthrop.edu/sinnj/PYSC_301/SPSS_Guides/correlation_and_regression.pdf

Smola, K.W. & Sutton, C.D. (2002). Generational differences: revisiting genrational work values for the new millennium. *Journal of Organizational Behavior*, 23, 363-382.

Stella McCartney (2016). *Stella McCartney's website.* Retrieved 30 May, 2016 from http://www.stellamccartney.com/experience/us/material/

Straughan, R.D. & Roberts, J.A. (1999). Environmental segmentation alternatives: a look at green consumer behavior in the new millennium. *Journal of Consumer Marketing*, 16(6), 558-575.

Suki, N.M. (2013). Young consumer ecological behaviour. The effects of environmental knowledge, healthy food, and healthy way of life with the moderation of gender and age. *Management of Environmental Quality: An International Journal*, 24(6), 726-737.

Ha, T. (2007). *Greeniology: How to live well, be green and make a difference.* Australia: Melbourne University Press.

Hofstede Centre (2016). *What about Thailand.* Retrieved from Hofstede Centre website : https://geert-hofstede.com/thailand.html

Hui, C.H. & Triandis, H.C. (1986). Individualism-collectivism: a study of cross-cultural researchers. J*ournal of Cross-Cultural Psychology*, 17, 225-248.

Tikka, P.M., Kuitunen, M.T., Tynys, S.M. (2000). Effects of educational background on students' attitudes, activity levels and knowledge concerning the environment. The Journal of Environmental Education, 31(3), 12-19.

Tsang, K.K (2012). The use of midpoint on Likert Scale: The implications for educational research. *Hong Kong Teachers' Centre Journal,* 11, 121-130.

Tseng, M.L., Wang, R., Chiu, A.S.F., Geng, Y. Lin, Y.H. (2013). Improving performace of green innovation practices in uncertainty. *Journal of Cleaner Production*, 40, 71-82.

Tuohy, A.P. & Stradling, S.G. (1987). *Maximum salience vs. golden selection proportion,* Utrecht, The Natherland: Utrecht University.

UNICEF (2006). *Adolescent Development in East Asia and Pacific: Realizing Their Potential*. New York: UNICEF.

UNICEF (2015). *State of The World's Children 2015 Country Statistical Information.* Retrieved from UNICEF website: http://www.data.unicef.org/corecode/ uploads/document6/uploaded_pdfs/corecode/SOWC_2015_all-countries-update_214.xlsx

United Nation (2004). *Annual report 2003*. [electronic]. Retrieved from UN website: http://www.un.org/esa/socdev/unyin/documents/worldyouthreport.pdf

United Nations, Department of Economic and Social Affairs, Population Division (2015). *World Population Prospects: The 2015 Revision*. New York: United Nations.

Vogt, W. P. (1999). *Dictionary of Statistics and Methodology: A Nontechnical Guide for the Social Sciences,* London: Sage.

Walker, D. (2008). Sustainability: environmental management, transparency and competitive advantage, *Journal of Retail and Leisure Property*, 7(2), 119-130.

Wang, X., Chan, H.K. (2013). A hierarchical fuzzy TOPSIS approach to assess improvement area hone implementing green supply chain initiatives. *International Journal of Production Research*, 51(10), 3117-3130.

Winge, T.M. (2008). Green is the new black: celebrity chic and the 'green' commodity fetish, *Fashion Theory*, 12(4), 511-524.

Yamane, T. (1967). *Statistics: An Introductory Analysis*. New York: Harper and Row.

Yang, C.L., Lin, S.P., Chan, Y.H.,Sheu, C. (2010). Mediated effect of environmental management on manufacturing competitiveness: An empirical study. *International Journal of Production Economics*, 123, 210-220.

APPENDICES

# APPENDIX A: QUESTIONNAIRE IN ENGLISH



The purpose of this questionnaire is to understand young Thai customer's purchase intention towards eco-fashion products. The study is part of Consulting Practice Course which is being conducted through College of Management Mahidol University (CMMU). Your response will be anonymous and only be used for educational purpose. This survey should take 10-15 minutes to complete. Thank you for your cooperation.

Eco-fashion is identically defined as the type of clothing designed and manufactured in order to minimise the negative environmental impacts. To take such impacts into account, the production of eco-fashion participates in using biodegradable or recycled materials and executing environmentally ethical manufacturing processes. In relation, eco-fashion involves with sustainable supply chain as a whole which is all about eco-material preparation, sustainable manufacturing, green distribution and retailing. Consequently, eco-fashion product is made along environmentally-friendly supply chain.

**Part1 : General Questions**

1. What is the most monthly expenditure you spent on your own?

☐ Food

☐ Clothes

☐ Tuition fees

☐ Books/ Educational equipments

☐ Expense on entertainment

☐ Residential rent

    ☐ Mobile-phone call fees

    ☐ Others (specify) _____


2. How often do you spend money on fashion products a month?

    ☐ Never (parental responsibility)

    ☐ Once a month

    ☐ 2-3 times a month

    ☐ Once a week

    ☐ More than once a week


3. What are the top 3 criteria you concern while you buy apparel?

(Please use 1-3 to rank your answers in order when 1 is the most important criterion)

    ☐ Additional benefits (UV protection, heat reserve, ventilation ability)

    ☐ Environmental impacts

    ☐ Favourite design

    ☐ Price

    ☐ Promotion

    ☐ Product quality

    ☐ Trend

    ☐ Others (specify) _____


4. Who would you like to go with when you buy apparel?

    ☐ Alone

    ☐ My friends

    ☐ My parent

    ☐ Your sibling

    ☐ Others _____

**Part 2: Specific Questions**

**Please specify the level of your agreement on the following statement:**

**(Assessment scale: 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = slightly agree, 5 = agree, 6 = strongly agree  )**

| Concern for self-image | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Supporting environmental protection makes me more socially attractive | | | | | | |
| Supporting environmental protection makes me special | | | | | | |
| I will be perceived by others as "out-dated" if I do not support environmental protection | | | | | | |
| Purchasing products with green labels make me feel smarter | | | | | | |
| Others would appreciate my green purchases as admirable actions | | | | | | |
| Getting involved with belonging apparel made of authentic animal parts causes me negative perception among others | | | | | | |
| **Environmental Attitude** | 1 | 2 | 3 | 4 | 5 | 6 |
| It is essential to promote green living in Thailand | | | | | | |
| I strongly agree that more environmental protection awareness works are needed  in Thailand | | | | | | |
| It is very important to raise environmental awareness among Thai people | | | | | | |
| Environmental issues are none of my business | | | | | | |
| I think environmental protection is meaningless | | | | | | |
| Environmental protection works are a waste of money | | | | | | |
| **Environmental Concern** | 1 | 2 | 3 | 4 | 5 | 6 |
| I am worried about the worsening of the quality of Thailand's environment | | | | | | |

| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| I am emotionally involved in environmental protection issues | | | | | | |
| I often think about how the environment quality in Thailand can be improved | | | | | | |
| Thailand's environmental problems causes negative effects on our health | | | | | | |
| Thailand's environmental problems are threatening the reputation of Thailand | | | | | | |
| I think Thailand's environmental problems are getting worse | | | | | | |
| **Environmental Knowledge** | 1 | 2 | 3 | 4 | 5 | 6 |
| I explicitly know what environmentally-friendly products are about | | | | | | |
| I know how environmentally-friendly products partakes in reducing environmental problems | | | | | | |
| Recycled materials is the practice of environmental reserve | | | | | | |
| I know what apparel brands are eco-friendly | | | | | | |
| Education have an influence on my green practices | | | | | | |
| My knowledge of environmental problems strongly push me to make green purchase | | | | | | |
| **Perceived Environmental Responsibility** | 1 | 2 | 3 | 4 | 5 | 6 |
| It is my duties to reserve the environment and natural resource in my country | | | | | | |
| My individual green action can supportively contribute environmental protection | | | | | | |
| How willing are you to take up responsibility to protect the environment in Thailand | | | | | | |
| Environmental protection is mainly such the responsibility of the government, not of any citizens | | | | | | |
| I should be responsible for protecting the environment in Thailand | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| How much responsibility do you have in protecting the environment in Thailand | | | | | | |
| **Social Influence** | 1 | 2 | 3 | 4 | 5 | 6 |
| How much do you learn about environmentally-friendly products from your friends | | | | | | |
| How much do learn about environmental issue from your friends | | | | | | |
| How much do you discuss with your friends about environmentally-friendly products | | | | | | |
| How much do you discuss with your friends about environmental issue | | | | | | |
| How often do you share information about environmentally-friendly products with you friends | | | | | | |
| I have learnt about environmental issues from my parents | | | | | | |
| **Actual behaviour and willingness to pay premium prices** | 1 | 2 | 3 | 4 | 5 | 6 |
| For the next apparel purchase, are you going to buy eco-fashion products since you know the impact of the actions | | | | | | |
| For the next apparel purchase, you will notice the environmental impact labeled on the clothing before making purchase decision | | | | | | |
| If the environmentally-friendly fashion products cost you more than usual ones, you are willing to pay for it | | | | | | |

**Part3: Demographic Questions**

Could you please provide your personal information as asked below

1.  Please specify your age _____

2.  What gender are you?

    _____ Male _____ Female

3.  What your education level are you?

    ☐ Junior High School

    ☐ Senior High School

    ☐ Bachelor Students

**Thank you for answering this questionnaire**

# APPENDIX B: QUESTIONNAIRE IN THAI



แบบสอบถามฉบับนี้จัดทำขึ้นเพื่อศึกษาพฤติกรรมการตัดสินใจซื้อสินค้าแฟชั่นที่เป็นมิตรต่อสิ่งแวดล้อมของกลุ่ม วัยรุ่นที่มีอายุระหว่าง 15-24 ปี การศึกษาครั้งนี้เป็นส่วนหนึ่งของวิชาปฏิบัติการให้คำปรึกษาของวิทยาลัยการจัดการแห่งมหาวิทยาลัย มหิดล คำตอบของผู้ตอบแบบสอบถามจะไม่ถูกเปิดเผยชื่อและข้อมูลส่วนตัว หากเพียงแต่ใช้เพื่อจุดประสงค์ของการศึกษาเท่านั้น โดย แบบสอบถามฉบับนี้จะใช้เวลาในการตอบประมาณ 10-15 นาที ซึ่งต้องขอขอบคุณเป็นอย่างยิ่งสำหรับความช่วยเหลือมาล่วงหน้านี้ ด้วย

อนึ่งสินค้าแฟชั่นที่เป็นมิตรต่อสิ่งแวดล้อมหมายถึงเสื้อผ้าและเครื่องนุ่งห่มที่ถูกผลิตขึ้นจากกระบวนการเลือก วัตถุดิบ กระบวนการผลิต และกระบวนการจัดส่งสินค้าที่คำนึงถึงสิ่งแวดล้อม เช่น การใช้ฝ้ายอินทรีย์ธรรมชาติ วัสดุรีไซเคิล สีย้อมที่ ผลิตจากธรรมชาติ หรือปราศจากสารพิษที่เป็นอันตรายต่อสิ่งแวดล้อม รวมไปถึงการใช้การจัดส่งที่สามารถช่วยลดการปล่อยก๊าซ คาร์บอน เช่น การขนส่งโดยเรือหรือรถไฟแทนการขนส่งโดยเครื่องบิน เป็นต้น

**ส่วนที่ 1: คำถามทั่วไป**

1.  คุณมีอายุอยู่ในช่วงระหว่าง 15-24 ปี

    ☐ ใช่

    ☐ ไม่ใช่

2.  ค่าใช้จ่ายของคุณส่วนใหญ่ถูกนำไปใช้เกี่ยวกับเรื่องใด (เลือกซื้อและจ่ายเงินด้วยตนเอง)

    ☐ อาหาร

    ☐ เสื้อผ้า

    ☐ ค่าเรียน/ ค่าเรียนพิเศษ

    ☐ หนังสือ/ อุปกรณ์การเรียน/ เครื่องเขียน

    ☐ ความบันเทิงต่างๆ (เช่น ดูหนัง/ เล่นเกม/ บัตรคอนเสิร์ต เป็นต้น)

    ☐ ค่าเช่าห้อง/ ค่าที่พัก

    ☐ ค่าโทรศัพท์

☐ อื่นๆ (โปรดระบุ) _____

3. คุณใช้จ่ายกับสินค้าแฟชั่นต่อเดือนมากน้อยแค่ไหน

☐ ไม่เคย (พ่อแม่ซื้อให้ทั้งหมด)

☐ 1 ครั้งต่อเดือน

☐ 2 - 3 ครั้งต่อเดือน

☐ 1 ครั้งต่อสัปดาห์

☐ มากกว่า 1 ครั้งต่อสัปดาห์

4. อะไรคือหลักเกณฑ์ที่คุณคำนึงถึงเมื่อซื้อเสื้อผ้าเครื่องนุ่งห่ม (เลือก 3 คำตอบ)

☐ คุณประโยชน์ที่เพิ่มขึ้น (เช่น สามารถปกป้องรังสี UV/ คุณสมบัติระบายอากาศ เป็นต้น)

☐ เป็นมิตรต่อสิ่งแวดล้อม

☐ ดีไซน์ที่ชื่นชอบ

☐ ราคา

☐ โปรโมชั่น

☐ คุณภาพของสินค้า

☐ เทรนด์/ ความเป็นสมัยนิยม

☐ อื่นๆ (โปรดระบุ) _____

5. บุคคลใดที่คุณชอบไปซื้อเสื้อผ้าเครื่องนุ่งห่มด้วยมากที่สุด

☐ ชอบเลือกซื้อตามลำพัง

☐ เพื่อน

☐ พ่อแม่

☐ พี่น้อง

☐ อื่นๆ (โปรดระบุ) _____

**ส่วนที่ 2: คำถามเฉพาะ**

**โปรดระบุระดับความเห็นด้วยต่อคำกล่าวต่อไปนี้**
(โดยที่ 1 = ไม่เห็นด้วยอย่างยิ่ง / 2 = ไม่เห็นด้วย / 3 = ค่อนข้างไม่เห็นด้วย / 4 = ค่อนข้างเห็นด้วย / 5 = เห็นด้วย / 6 = เห็นด้วยอย่างยิ่ง)

| การคำนึงต่อภาพลักษณ์ส่วนบุคคล | 1<br>ไม่เห็นด้วย<br>อย่างยิ่ง | 2<br>ไม่เห็น<br>ด้วย | 3<br>ค่อนข้างไม่<br>เห็นด้วย | 4<br>ค่อนข้าง<br>เห็นด้วย | 5<br>เห็นด้วย | 6<br>เห็นด้วย<br>อย่างยิ่ง |
|---|---|---|---|---|---|---|
| การสนับสนุนการอนุรักษ์สิ่งแวดล้อมทำให้ฉันเป็นบุคคลที่น่าสนใจในสังคม | | | | | | |
| การสนับสนุนการอนุรักษ์สิ่งแวดล้อมทำให้ฉันดูพิเศษขึ้น | | | | | | |
| ฉันจะถูกมองว่า "ล้าสมัย" หากไม่สนับสนุนการอนุรักษ์สิ่งแวดล้อม | | | | | | |
| การซื้อสินค้าที่เป็นมิตรต่อสิ่งแวดล้อมทำให้ฉันดูฉลาดมากขึ้น | | | | | | |
| ผู้อื่นจะชื่นชมการซื้อสินค้าที่เป็นมิตรต่อสิ่งแวดล้อมของฉันว่าเป็นเรื่องน่ายกย่อง | | | | | | |
| การมีเสื้อผ้าเครื่องนุ่งห่มที่ผลิตจากชิ้นส่วนต่างๆของสัตว์ ทำให้ฉันถูกมองในแง่ลบ | | | | | | |
| **ทัศนคติต่อเรื่องสิ่งแวดล้อม** | 1<br>ไม่เห็นด้วย<br>อย่างยิ่ง | 2<br>ไม่เห็น<br>ด้วย | 3<br>ค่อนข้างไม่<br>เห็นด้วย | 4<br>ค่อนข้าง<br>เห็นด้วย | 5<br>เห็นด้วย | 6<br>เห็นด้วย<br>อย่างยิ่ง |
| การส่งเสริมให้เกิดการใช้ชีวิตประจำวันที่เป็นมิตรต่อสิ่งแวดล้อมเป็นเรื่องจำเป็นในประเทศไทย | | | | | | |
| ฉันเห็นด้วยอย่างยิ่งที่ว่า การเพิ่มความตระหนักรู้ในเรื่องการอนุรักษ์สิ่งแวดล้อมเป็นเรื่องที่จำเป็นในประเทศไทย | | | | | | |
| การทำให้ความตระหนักรู้ในหมู่คนไทยต่อเรื่องสิ่งแวดล้อมเพิ่มขึ้นเป็นเรื่องที่สำคัญมาก | | | | | | |
| ปัญหาเกี่ยวกับสิ่งแวดล้อมไม่ใช่เรื่องที่อยู่ในความรับผิดชอบของฉัน | | | | | | |
| ฉันคิดว่าการอนุรักษ์สิ่งแวดล้อมเป็นเรื่องไร้ประโยชน์ | | | | | | |
| การอนุรักษ์สิ่งแวดล้อมเป็นเรื่องที่เสียเงินไปโดยเปล่าประโยชน์ | | | | | | |
| **ความสนใจในเรื่องสิ่งแวดล้อม** | 1<br>ไม่เห็นด้วย<br>อย่างยิ่ง | 2<br>ไม่เห็น<br>ด้วย | 3<br>ค่อนข้างไม่<br>เห็นด้วย | 4<br>ค่อนข้าง<br>เห็นด้วย | 5<br>เห็นด้วย | 6<br>เห็นด้วย<br>อย่างยิ่ง |
| ฉันมีความกังวลเกี่ยวกับคุณภาพของสิ่งแวดล้อมในประเทศไทยที่กำลังแย่ลงเรื่อยๆ | | | | | | |
| ฉันมีความรู้สึกร่วมอย่างมากต่อปัญหาสิ่งแวดล้อมในปัจจุบัน | | | | | | |
| ฉันคิดอยู่เสมอว่าคุณภาพของสิ่งแวดล้อมในเมืองไทยสามารถทำให้ดีขึ้นได้ | | | | | | |
| ปัญหาสิ่งแวดล้อมในประเทศไทยส่งผลลบต่อสุขภาพของพวกเรา | | | | | | |
| ปัญหาสิ่งแวดล้อมของประเทศไทยทำให้ชื่อเสียงของประเทศค่อยๆแย่ลง | | | | | | |

| ฉันคิดว่าปัญหาสิ่งแวดลอมในประเทศไทยกำลังแย่ลง | | | | | | |
|---|---|---|---|---|---|---|
| **ความรู้เกี่ยวกับเรื่องสิ่งแวดล้อม** | 1<br>ไม่เห็นด้วย<br>อย่างยิ่ง | 2<br>ไม่เห็น<br>ด้วย | 3<br>ค่อนข้างไม่<br>เห็นด้วย | 4<br>ค่อนข้าง<br>เห็นด้วย | 5<br>เห็นด้วย | 6<br>เห็นด้วย<br>อย่างยิ่ง |
| ฉันมีความเข้าใจชัดเจนว่าสินค้าที่เป็นมิตรต่อสิ่งแวดล้อมเป็นอย่างไร | | | | | | |
| ฉันรู้ว่าสินค้าที่เป็นมิตรต่อสิ่งแวดล้อมมีส่วนช่วยในการลดปัญหาสิ่งแวดล้อมอย่างไร | | | | | | |
| วัสดุใช้ซ้ำเป็นหนึ่งในกิจกรรมส่งเสริมการอนุรักษ์สิ่งแวดล้อม | | | | | | |
| ฉันรู้ว่าแบรนด์เสื้อผ้าใดที่มีความเป็นมิตรต่อสิ่งแวดล้อม | | | | | | |
| การศึกษามีอิทธิพลต่อการซื้อสินค้าที่เป็นมิตรต่อสิ่งแวดล้อม | | | | | | |
| ความรู้เกี่ยวกับปัญหาสิ่งแวดล้อมของฉัน ส่งผลอย่างมากต่อการซื้อสินค้าที่เป็นมิตรต่อสิ่งแวดล้อมของฉัน | | | | | | |
| **ความตระหนักในความรับผิดชอบส่วนบุคคล<br>ที่มีต่อสิ่งแวดล้อม** | 1<br>ไม่เห็นด้วย<br>อย่างยิ่ง | 2<br>ไม่เห็น<br>ด้วย | 3<br>ค่อนข้างไม่<br>เห็นด้วย | 4<br>ค่อนข้าง<br>เห็นด้วย | 5<br>เห็นด้วย | 6<br>เห็นด้วย<br>อย่างยิ่ง |
| การอนุรักษ์สิ่งแวดล้อมและทรัพยากรทางธรรมชาติเป็นหน้าที่ของฉัน | | | | | | |
| การลงมือปฏิบัติกิจกรรมใดๆเพื่อสิ่งแวดล้อมของฉันถือว่ามีส่วนช่วยในการอนุรักษ์สิ่งแวดล้อม | | | | | | |
| ฉันมีความเต็มใจที่จะรับผิดชอบต่อหน้าที่ในการอนุรักษ์สิ่งแวดล้อมในประเทศไทย | | | | | | |
| การอนุรักษ์สิ่งแวดล้อมเป็นความรับผิดชอบของรัฐบาลเท่านั้น ไม่ใช่ภาระหน้าที่ของประชาชน | | | | | | |
| ฉันควรมีส่วนรับผิดชอบต่อการอนุรักษ์สิ่งแวดล้อมในประเทศไทย | | | | | | |
| ฉันมีส่วนช่วยในการอนุรักษ์สิ่งแวดล้อมในประเทศไทยอย่างมาก | | | | | | |
| **อิทธิพลของสังคม** | 1<br>ไม่เห็นด้วย<br>อย่างยิ่ง | 2<br>ไม่เห็น<br>ด้วย | 3<br>ค่อนข้างไม่<br>เห็นด้วย | 4<br>ค่อนข้าง<br>เห็นด้วย | 5<br>เห็นด้วย | 6<br>เห็นด้วย<br>อย่างยิ่ง |
| ฉันเรียนรู้เกี่ยวกับสินค้าที่เป็นมิตรต่อสิ่งแวดล้อมจากเพื่อนของฉัน | | | | | | |
| ฉันเรียนรู้เกี่ยวกับปัญหาสิ่งแวดล้อมจากเพื่อนของฉัน | | | | | | |
| ฉันและเพื่อนของฉันแลกเปลี่ยนความคิดเห็นเกี่ยวกับสินค้าที่เป็นมิตรต่อสิ่งแวดล้อมอยู่เสมอ | | | | | | |
| ฉันและเพื่อนของฉันแลกเปลี่ยนความคิดเห็นเกี่ยวกับปัญหาสิ่งแวดล้อมอยู่เสมอ | | | | | | |
| ฉันและเพื่อนของฉันแบ่งปันข้อมูลเกี่ยวกับสินค้าที่เป็นมิตรต่อสิ่งแวดล้อมซึ่งกันและกัน | | | | | | |
| ฉันเรียนรู้ปัญหาสิ่งแวดล้อมจากพ่อแม่ของฉัน | | | | | | |

| พฤติกรรมการซื้อที่แท้จริง และความเต็มใจต่อการจ่ายเพิ่ม | 1 ไม่เห็นด้วย อย่างยิ่ง | 2 ไม่เห็น ด้วย | 3 ค่อนข้างไม่ เห็นด้วย | 4 ค่อนข้าง เห็นด้วย | 5 เห็นด้วย | 6 เห็นด้วย อย่างยิ่ง |
|---|---|---|---|---|---|---|
| ฉันจะซื้อสินค้าแฟชั่นที่เป็นมิตรต่อสิ่งแวดล้อมในการซื้อเสื้อผ้าเครื่องนุ่งห่มของฉันครั้งต่อไป เนื่องจากทราบว่าพฤติกรรมเหล่านั้นส่งผลต่อสิ่งแวดล้อม | | | | | | |
| ฉันจะสังเกตฉลากของเสื้อผ้าว่าเป็นสินค้าที่เป็นมิตรต่อสิ่งแวดล้อมหรือไม่ ก่อนตัดสินใจซื้อ | | | | | | |
| หากสินค้าแฟชั่นที่เป็นมิตรต่อสิ่งแวดล้อมมีราคาสูงกว่าสินค้าแบบปกติ ฉันก็เต็มใจที่จะซื้อสินค้าเหล่านั้น | | | | | | |

**ส่วนที่ 3: คำถามทางประชากรศาสตร์ (ขอความกรุณาตอบคำถามเกี่ยวกับข้อมูลส่วนตัว)**

1.   อายุ _____

2.   เพศ

     ⬜ หญิง

     ⬜ ชาย

3.   ระดับการศึกษา

     ⬜ มัธยมศึกษาตอนต้น

     ⬜ มัธยมศึกษาตอนปลาย

     ⬜ ปริญญาตรี

     ⬜ ปริญญาโท

     ⬜ อื่นๆ (โปรดระบุ) _____

**ขอขอบคุณอีกครั้งที่สละเวลาเพื่อตอบแบบสอบถามในครั้งนี้**

## APPENDIX C: SPECIFIC QUESTION REFERENCES

| Questions | References |
|---|---|
| **Factor: Concern for self-image** | |
| Supporting environmental protection makes me more socially attractive | Lee, 2008; Kumar and Ghodeswar, 2015 |
| Supporting environmental protection makes me special | Lee, 2008 |
| I will be perceived by others as "out-dated" if I do not support environmental protection | Lee, 2008 |
| Purchasing products with green labels make me feel smarter | Park and Ha, 2012; Oliver and Lee, 2010; Ha, 2007 |
| Others would appreciate my green purchases as admirable actions | Park and Ha, 2012; Oliver and Lee, 2010 |
| Getting involved with belonging apparel made of authentic animal parts causes me negative perception among others | Carrigan et al, 2004; Joergen, 2006; Claudio, 2007; Lee, 2008; Ochoa, 2011 |
| **Factor: Environmental Attitude** | |
| It is essential to promote green living in Thailand | Lee, 2008 |
| I strongly agree that more environmental protection awareness works are needed in Thailand | Lee, 2008 |
| It is very important to raise environmental awareness among Thai people | Lee, 2008 |
| Environmental issues are none of my business | Lee, 2008 |
| I think environmental protection is meaningless | Lee, 2008 |
| Environmental protection works are a waste of money | Lee, 2008 |

| Questions | References |
|---|---|
| **Factor: Environmental Concern** | |
| I think Thailand's environmental problems are getting worse | Lee, 2008 |
| I am worried about the worsening of the quality of Thailand's environment | Lee, 2008 |
| I am emotionally involved in environmental protection issues | Lee, 2008 |
| I often think about how the environment quality in Thailand can be improved | Lee, 2008 |
| Thailand's environmental problems causes negative effects on our health | Lee, 2008 |
| Thailand's environmental problems are threatening the reputation of Thailand | Lee, 2008 |
| **Factor: Environmental knowledge** | |
| I explicitly know what environmentally-friendly products are about | Shen et al., 2012 |
| I know how environmentally-friendly products partakes in reducing environmental problems | Shen et al., 2012; Kanchanapibul et al., 2013 |
| Recycled materials is the practice of environmental reserve | Anson, 2012 |
| I know what apparel brands are eco-friendly | Shen et al., 2012 |
| Education have an influence on my green practices | Straughan and Roberts, 1999 |
| My knowledge of environmental problems strongly push me to make green purchase | Promotosh and Sajedul, 2011, Kanchanapibul et al., 2013 |
| **Factor : Perceived Environmental Responsibility** | |
| It is my duties to reserve the environment and natural resource in my country | Lee, 2008 |

| Questions | References |
|---|---|
| **Factor : Perceived Environmental Responsibility** | |
| My individual green action can supportively contribute environmental protection | Lee, 2008 |
| How willing are you to take up responsibility to protect the environment in Thailand | Lee, 2008 |
| Environmental protection is mainly such the responsibility of the government, not of any citizens | Lee, 2008 |
| I should be responsible for protecting the environment in Thailand | Lee, 2008 |
| How much responsibility do you have in protecting the environment in Thailand | Lee, 2008 |
| **Factor: Social Influence** | |
| How much do you learn about environmentally-friendly products from your friends | Lee, 2008 |
| How much do learn about environmental issue from your friends | Lee, 2008 |
| How much do you discuss with your friends about environmentally-friendly products | Lee, 2008 |
| How much do you discuss with your friends about environmental issue | Lee, 2008 |
| How often do you share information about environmentally-friendly products with you friends | Lee, 2008 |
| I have learnt about environmental issues from my parents | Promotosh and Sajedul, 2011 |

| **Dependent variables : Purchase intention, actual behaviour and willingness to pay premium prices** | |
|---|---|
| For the next apparel purchase, are you going to buy eco-fashion products since you know the impact of the actions | Lee, 2008 |
| For the next apparel purchase, you will notice the environmental impact labeled on the clothing before making purchase decision | Lee, 2008; Chan and Wong, 2012 |
| If the environmentally-friendly fashion products cost you more than usual ones, you are willing to pay for it | Lee, 2008; Shen et al., 2012 |