QUALITATIVE STUDY ON PERCEPTION OF HYPER- AND SUPERMARKET CONSUMERS IN BANGKOK AREA TOWARDS STORE-PROVIDED PLASTIC BAG



A THEMATIC PAPER SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF MANAGEMENT COLLEGE OF MANAGEMENT MAHIDOL UNIVERSITY 2015

COPYRIGHT OF MAHIDOL UNIVERSITY

Thematic paper entitled

QUALITATIVE STUDY ON PERCEPTION OF HYPER- AND SUPERMARKET CONSUMERS IN BANGKOK AREA TOWARDS **STORE-PROVIDED PLASTIC BAG**

was submitted to the College of Management, Mahidol University for the degree of Master of Management

> on December 13, 2015



Ph.D. Advisor

Ph.D. Chairperson

Assoc. Prof. Annop Tanlamai,

Ph.D. Dean College of Management Mahidol University

Asst. Prof. Parisa Rungruang, Ph.D. Committee member

ACKNOWLEDGEMENTS

My sincere gratitude went to my thematic advisor, Asst. Prof. Nareerat Taechapiroontong for her supervision and support throughout the course of thematic paper. She is not only gave me variety of knowledge related to the study, but also words of encouragement which help me to walk onto each step and achieve the terminal goal of this challenging study.

Secondly, I would like to thank all my anonymous research samples who had devoted their precious time and effort in sharing information, perspectives, insights, as well as several personal aspects which might be perceived as inconvenient at times. All of them had greatly contributed to the qualitative data analysis for this study. Without their willingness and devotion, this thematic paper would not have been completed.

Last but not least, I am grateful for my family, especially my parents, Mrs. Orathai and Mr. Bancha Prachyapanuchart, for their wholehearted support and encouragement throughout my memorable years at CMMU.

973000

Itchaya Prachyapanuchart

QUALITATIVE STUDY ON PERCEPTION OF HYPER- AND SUPERMARKET CONSUMERS IN BANGKOK AREA TOWARDS STORE-PROVIDED PLASTIC BAG

ITCHAYA PRACHYAPANUCHART 5649231

M.M. (MARKETING AND MANAGEMENT)

THEMATIC PAPER ADVISORY COMMITTEE: ASST. PROF. NAREERAT TAECHAPIROONTONG, Ph.D., ASST. PROF. KANNIKA LEELAPANYALERT, Ph.D., ASST. PROF. PARISA RUNGRUANG, Ph.D.

ABSTRACT

This research aims to identify possible obstructions to the reduction of store-provided plastic bags usage through exploring Thai consumers' perception towards the idea. The theory of Planned Behavior, Affective Cognitive Consistency, and several other potential factors were extracted from existing literatures and adopted as the assumptions for primary research. The data were collected qualitatively, using open-ended interview questions. Twenty-five interviewees were randomly intercepted during regular grocery shopping routine in hyper- and supermarkets in Bangkok area and were semi-screened to include 13 shoppers who travel to the store by personal vehicle and another 12 by public transportation. The findings reaffirmed most of the assumptions fabricated from the research's frameworks, as well as introduced several new factors. Consequently, it yielded the recommendation of potentially effective methods in inducing such behavior among Thai consumers in Bangkok area. The limitations and contributions were also discussed in the paper.

KEY WORDS: Consumer Behavior / Attitude / Plastic bag / Environmental concern / Grocery shopping

30 pages

CONTENTS

	Page		
ACKNOWLEDGEMENTS	ii		
ABSTRACT			
LIST OF TABLES			
LIST OF FIGURES	vii		
CHAPTER I INTRODUCTION	1		
2.1 Research question	2		
2.2 Research objective	2		
2.3 Research framework	3		
CHAPTER II LITERATURE REVIEW	4		
2.1 Approaches and frameworks	5		
2.1.1 Individual determining variables	6		
2.1.2 Normative social influence	6		
2.1.3 Affective Cognitive Consistency	7		
2.2 Potential related factors	8		
2.2.1 Environmental concern	8		
2.2.2 Convenience-seeking behavior	8		
2.2.3 Social influence	8		
2.2.4 Collectivistic versus individualistic values	9		
CHAPTER III RESEARCH METHODOLOGY	10		
3.1 Research design	10		
3.2 Sampling	11		
3.3 Data collection	12		
3.4 Research questions	12		
3.4.1 Leading questions	12		
3.4.2 General behavior	13		
3.4.3 Attitudes towards the behavior	13		
3.4.4 Subjective norms	13		

CONTENTS (cont.)

	Page
3.4.5 Perceive behavioral control	14
3.4.6 Spontaneous comment	14
CHAPTER IV RESEARCH FINDINGS	15
4.1 Store-provided plastic bags usage as a Planned Behavior	16
4.1.1 Attitude towards the behavior	16
4.1.2 Related subjective norms	18
4.1.3 Perceived behavioral controls	20
4.2 Affective component of the attitude towards store-provided	
plastic bags usage	23
4.3 Additional aspects	24
4.3.1 General grocery shopping behaviors	24
4.3.2 Lack of environmental related knowledge	25
4.3.3 Prior acknowledged store's positioning	25
4.4 Summary	25
CHAPTER V CONCLUSIONS	27
5.1 Recommendations	28
5.2 Limitations of the research	29
5.3 Research contribution	30
5.3.1 Academic Contribution	30
5.3.2 Practitioner Contribution	30
REFERENCES	31
BIOGRAPHY	37

LIST OF TABLES

Table		Page	
4.1	Summary of research findings	26	
5.1	Summary of research frameworks and supporting contents	28	



LIST OF FIGURES

Figur	e	Page
2.1	Theory of Planned Behavior (TPB)	6
3.1	Adapted Theory of Planned Behavior model	11
4.1	Gender of the sample group	16

CHAPTER I INTRODUCTION

This very first chapter exemplifies the underlying motivation of the research, the severity and urgency of global environmental problems, and proposes the eradication of store-provided plastic bags usage as one of the potential solutions. It further covers the research question, objectives, as well as brief prelude to the research frameworks.

The unexpectedly increasing of both severity and frequency of extreme weather events; floods or droughts, occurred around the world, showed the undeniable truth that climate change or global warming is getting worse and environmental problems are amongst the most serious issues requiring fixes now. It has been significantly recognized and concerned by many international organizations such as, United Nations (UN) who has specially set up United Nations Environment Programme (UNEP) for the cause, World Wide Fund for Nature (WWF), United States' National Aeronautics and Space Administration (NASA) and so on. And countless number of worldwide studies and statements had been resonated that the environmental problems are whether direct or indirect impacts of accumulated human actions; what humanity has produced and fed to the earth.

Recent study showed Thailand is among the top countries which are responsible of most plastic waste discard in the world oceans. The main reason suggested is that the country's plastic, especially plastic-intensive, goods production and consumption are gigantically rising in align with its rapid economic growth, improved societies well-being yet there were no proper steps taken towards possessing efficient waste management infrastructures to tackle with excessive waste (McKinsey&Company and Ocean Conservancy, 2015).

In South East and East Asian region, Thailand generated the fourth highest annual waste in weight, ranked after PR China, Japan, Indonesia and Republic of Korea. Despite having plastic waste obliged for 10.9% of total municipal waste, we have limited technology dealing with waste treatment both in terms of quantity and quality. Majority of waste management facilities available in Thailand, which is scarce considering the amount of waste we generate, are landfills with only a few incineration facility units, whilst other waste generator giants have superior number and diversity of treatment methods in operation; such as waste treatment factories, incineration facility, material recovery, solidification or gasification units. (UNEP, 2010) Plastic waste is listed among the significant areas of waste management which Thailand is still lacking of proper coping policies and practices; separated from treating normal waste with special technical facilities (Global Partnership on Waste Management, 2015).

Plastic is literally is our fingertips all day long. There are plastics goods which stay with us for a long period of time and meant to be disposed only once in a while and also those that we normally waste away every day without paying any attention at all. Moreover, from mass consumers' perspective and what we can do, it surely seems rather relevant to talk about household consumption and waste than the industrial production and emission, which seems far from home and more likely to have nothing to do with us. This study was inspired by the thought of reducing the usage of store-provided plastic bags from hyper- and supermarket, the popular mode of urban grocery shopping, as one of many ways that Thai consumers can start acting now to help maintaining and improving our ecological systems.

1.1 Research question

How do Thai consumers in Bangkok area perceive the usage of storeprovided plastic bags from hyper- and supermarket?

*ขย*าลียุ พ

1.2 Research objective

This research aims to use literature reviews and qualitative study to acquire the in depth understanding on factors behind consumers' accepting and/or declining store-provided plastic bags behavior. This is in order to cast light on how one can further construct the effective ways to influence the shoppers towards giving up the excess use of plastic bags, which is one of the easiest way to ease the waste problems and help remedy the environmental issues.

1.3 Research framework

In this research, the well-known theories in the field of consumer behavior, namely the Theory of Planned Behavior and Reasoned Action (Ajzen, 1991; Ajzen and Fishbein, 1975) and the Theory of Affective Cognitive Consistency (e.g. Rosenberg, 1960, 1968), as well as several potential drivers of environmental related attitudes and behaviors studied by significant number of previous researches were adopted in designing the assumptions and qualitative interview questions respectively.



CHAPTER II LITERATURE REVIEW

Embodied under this chapter are actualities related to the research topic. Existing literatures were studied and analyzed in the efforts to rationalize the importance of intensive plastic products reduction and explore the possible factors influencing consumers' behavior associated with environment issues. Consecutively, the investigation led to assumptions and frameworks which are to be adopted in fabricating the methodology of the research in the next chapter.

It takes from 400 to 1,000 years for plastic bags to decompose. The newly introduced bio-degradable carrier bags which are synthesized from less percentage of non-oil-based material may decompose in shorter length of time under certain conditions. However, if lack of necessary elements for the degradation process; for examples, water, light and oxygen, even bio-degradable plastic bag or paper bags cannot completely degrade in modern landfills. Yet the degradable plastic is potentially release the greenhouse gas methane in its degradation process if occur anaerobically (Northern Ireland Assembly, 2011).

Amongst consumers' products which ended up as plastic debris, the single use plastic packaging obviously is most prevalently and frequently consumed and deposed. After they were first introduced, dated back in 1977 (Gogte, 2009), due to its qualities of being functional, lightweight, strong, cheap and hygienic, plastic bag usage has become pandemic. Annually around five hundred billion to one trillion plastic bags are consumed worldwide; which means more than one million bags per minute (Sanglimsuwan et al., 2012), while the rate of plastic waste being recycled in many countries including Thailand is wistfully scant as stated earlier.

In practical, there have been actions aiming to reduce the use of plastic bag in Thailand by a few organizations. Central Retail Corporation Ltd held a 45 days campaign starting from 2009 World Environment Day, offering its retail shoppers who brought their own cloth bags to shopping with one percent discount as well as provided the plastic bag for one Baht each. Since 2013, CP All Public Company Limited, who operates the most widespread and well-known convenience store chain in Thailand, 7-Eleven, started implementing the policy of encouraging customers to give up plastic bag when they purchase less than two items (Duboise, 2013).

However it can still be seen that very limited number of Thai consumers have tendency to decline the usage of plastic bags provided by the stores they go to for shopping despite the well-known hazards of plastics waste on ecosystems suggested by scientists worldwide (Turner and Sutton, 2012; Abdul et al., 2013), several research results suggesting Thai consumers are already aware of environmental issues (Rice et al., 2010; Dansirichaisawat and Suwunnamek, 2014) and the fact that eliminating these single use plastic bags is the easiest and closest way to their homes to help easing the world's pollution problems.

Declining the usage of single use plastic products, like shopping goods carrier plastic bags, can be considered as an environmental conscious behavior of consumers. Talking about and trying to rationalize the environmental concerned behavior is nothing new. It has been named variedly as pro-environmental behavior, eco-friendly behavior, socially responsible behavior and etc., while green consumers, socially conscious consumers, and so on were used for labeling those who possess such behavior (Singh, 2009).

At the dawn of the eco-conscious study, Dunlap along with his colleagues had introduced the New Environmental Paradigm (NEP) to capture the essence of then just emerged concept. (Dunlap and Van Liere, 1978; Catton and Dunlap, 1980) It was acknowledged and widely adopted as a foundation for further study on attitudinal environmental concern (Schultz and Zelezny, 1999; Bamberg, 2003; Kim and Choi 2005; Abdul-Muhmin, 2007).

2.1 Approaches and frameworks

Plenty of researches had been done hitherto in order to understand the underlying factors driving consumers towards green behavioral intention or behavior. Diverse approaches used so far can be classified into two major categories.

2.1.1 Individual determining variables

In examining why a consumer possesses ecological behaviors, one noteworthy trend is the focusing almost solely on factors associated with individual variables, both in terms of demographic or psychographic (Shrum et al., 1994; Tanner and Kast, 2003). However, research showed unsubstantial impact of demographic or socio-economic profiles, such as gender, education, social class, number of children and etc., on its samples' green consciousness and behavior (Diamantopoulos et al., 2003). In more decent angle, studies on the relevance between psychographic factors and pro-environmental behaviors had been done. The variables examined include, for example, personality (Kinnear et al., 1974), values and beliefs (Granzin and Olsen, 1991), moral norms (Stern, 2000), knowledge (Kaiser and Fuhrer, 2003), attitudes, either in general or in particular (Balderjahn, 1988; Schlegelmilch et al., 1996; Bamberg, 2003; Kilbourne and Pickett, 2008). Yet it appeared as results of several researches that psychological factors are relatively disappointing in predicting consumers' eco-conscious behaviors (Mainieri et al., 1997; Gupta and Ogden, 2009).

2.1.2 Normative social influence

More holistic concepts for understanding consumers had been introduced consecutively. Social influence is recognized and embedded in these theories through the composition of subjective norms. They were also frequently taken into account as foundations for researches studying consumers' pro-environmental decisions.

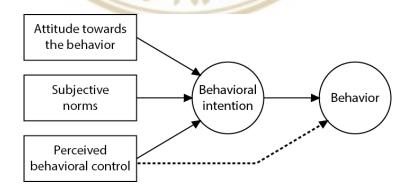


Figure 2.1 Theory of Planned Behavior (TPB) Source: Ajzen, 1991

Ajzen (1991) proposed the Theory of Planned Behavior (TPB) as in Figure 2.1 following and perfecting the prior Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1975) as a psychological mechanism which aids the understanding of human behavior. Both the TRA and the TPB suggested two factors influencing behavioral intention; first, behavioral beliefs or the attitudes towards the behavior, and second, normative beliefs or the normative expectations of others. Yet TPB had embedded additional concept of imperfectly voluntarily of behavior. It included perceived behavioral control; the beliefs about potential factors that may be facilitating or impediment, as another factor affecting the intention as well as directly governing the behavior.

Several examples of the adoption of this framework include the studying on consumers' green purchasing behavior (Sparks and Shepherd, 1992), intention to recycle (Taylor and Todd, 1995), renewable energy preference (Bang et al., 2000), eco-friendly transportation choices (Heath and Gifford, 2002), and more.

2.1.3 Affective Cognitive Consistency

Affective Cognitive Consistency (ACC) theory had been proposed as the other way in examining consumers' behavior. The theory emphatically focuses on attitude(s) behind the behavior and explored two major distinctive sides of it, which are the affective component and the cognitive component (e.g. Rosenberg, 1960; Bem, 1970; Triandis, 1971; Eagly & Chaiken, 1993, 1995). The person's beliefs or thoughts regarding the behavior are referred to as the cognitive component of attitude while the affective component consists of the individual's degree of positive or negative feeling apropos the target. In order for the attitude to be effectively motivating and result in actual behavior, exhibiting only one out of the two components, regardless of how strongly, is inadequate; a certain level of consistency between two components is as well required. Rosenberg had summarized his findings later on that "those who show less intra-attitudinal consistency are, on the average, less invested in the issue and less likely to have a presently stable orientation toward it" (1968, p.88).

Propounding the TPB and ACC concepts together, attitude towards the behavior, subjective norms and perceived behavioral control, suggested by Ajzen (1991) as mentioned earlier, can be considered to be on the cognitive side. Thus what is still missing is the intensity of the affective part; individual's level of commitment to such attitude.

2.2 Potential related factors

Apart from assuming Ajzen's TPB model (1991) and Rosenberg's ACC theory (1960, 1968) as the underlying mechanism for understanding consumers' decision to decline usage of store-provided plastic bags, this study had explored more potential related factors that can impact consumers' pro-environmental behavior from previous researches, including;

2.2.1 Environmental concern

As bluntly as it may sound, handful of researches had been conducted to show the consequential relationship between environmental concern itself and consumers' environmental friendly behaviors, such as recycling (Schlutz and Oskamp, 1996), willingness to pay extra for green products (Loureiro et al., 2002), and varied purchasing behaviors (Chan, 1996; Kim and Choi 2005).

2.2.2 Convenience-seeking behavior

A research conducted in India found that comfort or convenience has negative association on Indian consumers' green behavior intention. Specifically for plastic bags consumption, the sample size had expressed it is "more convenient and should not be banned" (Rajyalakshmi, 2014). This result aligns with previous studies which showed the tendency of consumers offering only verbal commitment but no actual willingness for environmental conscious consumption (Follows and Jobber 2000; Sammer and Wüstenhagen 2006; Conraud-Koellner and Rivas-Tovar 2009).

2.2.3 Social influence

Social influence is closely in regard to the subjective norms element of TPB model. It refers to social pressure from significant others that can alter the consumers' choices depending on their motivation to comply with these influential individuals. Bamberg and Möser (2007) had found in their study that social norm, though not directly, is a significant determinant of environmental friendly behavior intention. The effect of interpersonal influence on consumers' beliefs concerning the environment was adopted as an assumption for further investigation in this research.

2.2.4 Collectivistic versus individualistic values

9130

Collectivistic and individualistic are a pair of opposite values among several other popular cultural dimensions theorized by Hofstede (1984). Many studies on environmental friendly attitude and behavior are in line with this concept. A study done by Stern and Dietz (1994) had pointed out the relatedness between environmental concern and egoistic, social altruistic values of consumers. Shultz and Zeleny (1999) had conducted the research with the result that universalism, power and tradition can predict how earnest consumers' eco-consciousness is. McCartny and Shrum (2001) also concluded that the individualism and collectivism dichotomy and environmental beliefs are relevant. Regardless of differentiated study methods, all mentioned researches are backing the negative relationship between green perception and / or behavior and individualistic value.

CHAPTER III RESEARCH METHODOLOGY

Within this chapter, the research methodology is constructed and illustrated based on the assumptions synthesized from literature review in the previous chapter. It covers the justification of data collection method, sampling, and also portrays the list of open-ended interviewing questions in concordant structure derived from research frameworks.

3.1 Research design

The research was conducted in the method of one-on-one interviewing in order to profoundly understand which factors potentially obstruct the reduction of store-provided single use plastic bag usage among Thai consumers in Bangkok area. Even though studies had been done to point out about their possession of environmentally concerned characteristics, (Rice et al 2010; Dansirichaisawat and Suwunnamek 2014) it is obvious that Thai consumers still lack of awareness and / or willingness to give up using these plastic bags. The qualitative method was chosen for this study based on the belief that the previous conducted quantitative researches might have overlooked sincere and subjective opinion of the sampling due to prior determined closed-end questionnaire questions.

The Theory of Planned Behavior by Ajzen (1991) and Reasoned Action (Ajzen and Fishbein 1975) mentioned in the previous chapter was adopted as a model approach. The assumptions and questions for examining consumer perception towards the behavior of not using store-provided plastic bags were structured in four major areas according the key elements of the model.

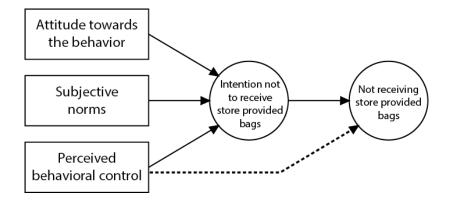


Figure 3.1 Adapted Theory of Planned Behavior model

First is consumers' personal attitude, value or opinion on the target behavior. Secondly came the subjective norms which are the aspect of consumers' perception being influenced by social pressure whether in large or small scale. Last but not least is the perceived behavioral control or consumers set of beliefs that can affect the perceived possibility of performing the action of not receiving store-provided bags when going for grocery shopping.

Another concept used as an assumption for designing the interview question is Affective Cognitive Consistency theory (Rosenberg, 1960, 1968), which was introduced respectively in the previous chapter. In order for the environmental problems awareness to be successfully carried out as green behavior, in this case, declining the use of store-provided plastic bags, ACC model had filled in the gap for the affective component or the level of engagement individual has towards such attitude.

As suggested in chapter three, several psychological characteristics of consumers were also brought into investigation as the potential factors impacting their attitudes, subjective norms as well as perceived behavioral controls, including eco-consciousness, convenience-seeking preference, social influence, and altruistic value.

3.2 Sampling

Random 25 interviewees were intercepted right after their regular journey to grocery shopping in hyper- and supermarkets in Bangkok area. Despite the fact that wet markets still hold greater market share in grocery shopping across Thailand, modern retail stores; like hyper- and supermarket, have been perceived by consumers as being superior, more hygienic and convenient. It had replaced wet markets as the first option that middle to high income Thai consumers living in Bangkok area choose for grocery shopping with also constant growth rate and expansion into provincial area. (KPMG 2006; McKinsey&Company 2010; Minister of Agriculture and Agri-Food Canada 2012; Gorton et al 2009)

In order to capture as well-rounded as possible response, the sample size was intentionally screened to be consist of 12 shoppers who travel to and back from the store by public transportation and another 13 shoppers who travel by personal vehicle.

3.3 Data collection

With aim to gain in depth information on consumers' perception towards the usage of store-provided plastic bags, the data was collected by qualitative method; using open-ended questions for interviewing the sampling. The interviewees were also asked several unscripted questions where interviewer saw appropriate to push them towards giving more extensive and detailed opinions and / or keep the smooth conversational flow.

ตยาลียม

3.4 Research questions

Research questions were designed revolving around Ajzen's TPB model (1991) mainly, Rosenberg's ACC attitudinal concept (1960, 1968) and potential related factors of consumer eco-consciousness mentioned in the previous chapter, including environmental concern, comfort or convenience, social pressure or peer influence, and individualistic versus collectivistic values.

3.4.1 Leading questions

What are the first few things you think about when thinking about environmental issues?

Please name several methods you think can help easing environmental problems? And have you been doing any of them?

Do you think single use plastic bag is one among the potential cause of environmental problems?

Do you know how Thailand's plastics waste treatment is operated?

Have you heard about any foreign country's policy in dealing with plastic bags consumption and waste?

3.4.2 General behavior

How often do you go for grocery shopping? Please give estimated amount of money you pay for on average and how many people are there in your household.

Is this hyper- / supermarket your usual place of grocery shopping? Do you have more than one store for your grocery shopping? Is it or are they in your normal commute circle?

What is your normal mode of transportation to grocery shopping?

Have you brought your own bag, either cloth or plastic, to carry your shopped goods before?

3.4.3 Attitudes towards the behavior

Have you ever find store employees sometimes giving you too many bags? Would you consider bringing your own bag to shopping and / or declining the store-provided plastic bag? Why?

3.4.4 Subjective norms

Do you know anyone who normally declines the store-provided plastic bags? If you know, are you close to each other?

Who do you think affects your grocery shopping behavior the most?

What do you think if this / these person(s) bring his / her / their own bags to shopping and / or decline the store-provided plastic bag? Will that makes you more positive about giving up using the bags?

Which social media are you on more often? Have you seen or subscribed to any pro-environmental material feed?

Would you think declining the store-provided plastic bags is something someone can brag about? Will you feel proud if you stop receiving the bags?

3.4.5 Perceive behavioral control

How do you think the absence of store-provided bag will affect the grocery shoppers?

What do you think could obstruct people from giving up receiving these single use plastic bags?

If none of hyper- / supermarket and other grocery place provides bags any longer, what will you do?

3.4.6 Spontaneous comment

Please name several things you think can drive people to bring their own bag and / or declining single use plastic bags.

What do you think and what will you do if your usual hyper- / supermarket stops providing you the bags?

What do you think and what will you do if your usual hyper- / supermarket provides you less bag for the same basket size you used to purchase?

What do you think and what will you do if your usual hyper- / supermarket offers discount for you not accepting store-provided bag?

What do you think and what will you do if your usual hyper- / supermarket charges you more for requiring the store-provided bag?

CHAPTER IV RESEARCH FINDINGS

This chapter comprehensively clarified the result from research data collection and analysis, started from overview on general demographic characteristics of the sample group to the harvest of recorded interview analyzing. It unraveled the consumer perceptions regarding the use of store-provided plastic bags given out by supermarket and hypermarket and categorized them in accordance with research assumptions as well as pinpointed several other noteworthy aspects freshly discovered.

The data was collected by intercepting and interviewing random shoppers at hyper- and supermarkets in Bangkok area after their regular grocery shopping trip. Total 25 samples consisted of 12 shoppers who travel to and back from the store by mean of public transportation and the rest 13 by personal vehicle. In actual data collection interviewing of several samples, not all 24 questions listed in the previous chapter were applied, because the target area of information was partially covered by the answers shoppers already gave to prior questions. The list was also mostly switched from planned chronological order, plus, there were spontaneous questions added in to probe the interviewees into yielding more engaged information to the topic.

The sample group turned out to have 18 females and 7 males. 11 of the interviewees had the shopping trip with their spouse or family on the date the data was collected whilst the other 14 went for their shopping alone. The average age of the samples is 40.70 year old with standard deviation of 9.3386 year old. The average length of time taken by each interview is 18.70 minutes with standard deviation of 5.0408 minutes.

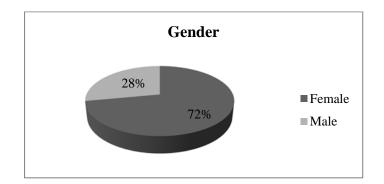


Figure 4.1 Gender of the sample group

Gathered information on interviewees' stories and opinions revealed the consumers' perception, perceived norms and controls as well as the affective level of their attitude towards the store-provided plastic bags usage in regard to their grocery shopping habits. Collected responses exhibited the possible reasons that obstruct Thai consumers from reducing or declining the use of store-provided plastic bags in accordance with the frameworks and concepts facilitated by secondary research in the literature review chapter. The whole qualitative assessment can be separately proffered in 3 major parts, including store-provided plastic bags usage as a Planned Behavior, affective component of the attitude towards store-provided plastic bags usage, and additional aspects found.

4.1 Store-provided plastic bags usage as a Planned Behavior

In assessing consumers' perception towards the store-provided plastic bags usage as a Planned Behavior according to Ajzen's Theory of Planned Behavior (1991), the data collected from all research's samples can be assimilated and categorized into three separate yet associating segments. They are attitude towards the behavior, related subjective norms, and perceived behavioral control.

4.1.1 Attitude towards the behavior

The attitudinal perceptions extracted from the research responses can be assorted into four major concepts, including;

4.1.1.1 Ineffectiveness and nonnecessity

Declining the usage of store-provided plastic bag by consumers is viewed as ineffective and not necessary action. More than half of the respondents had mentioned the reusability of these seem-to-be single-use bags as the garbage bags in their houses. Yet the research had found several samples that strongly resorted they are against the activity, for examples;

"There are those industrial sites that discharge wastes every day, so huge in both number and scale. Why do I and such small action matter?" one of the male respondents asked back.

"It [eliminating or reducing the plastic bags usage] does not make any sense because you are solving the problem at the symptom level. If the stores do not provide these bags for carrying, people will have to buy them solely for bringing the garbage out their homes instead. So the plastic used by household will stay just the same. I will give support only if there is a preventive policy; obviously not this one." is the vision shared by another male interviewed sample.

4.1.1.2 Cost of the stores

Significant number of interviewees in the study had displayed their notion regarding the provided plastic bags merely as a cost of the stores. Therefore, cutting the usage of these bags is perceived as a way that the stores might choose to execute in order to lessen their cost.

"I thought they [the stores] would like to cut the cost. That's why they have been doing all these campaigns so far." said the middle-aged female respondent who normally shops at the store which currently gives reward points to the customers rejecting the provided plastic bags.

"[The store] cannot just cancel the providing [of plastic bags]. They are going to save some costs [by not providing the bags], so, to be fair, they must give something in return." stated the older adult female interviewee.

4.1.1.3 Responsibility of higher sectors

Solving the global environment problems was reflected as the responsibility of the governmental sectors and / or the leading research and development organizations in science and technology. There are a few studied interviewees who had strongly stated that eliminating or lowering the consumption of

intensive plastic products, such as store-provided bags, should not be concerned by the end users at all.

"I have seen it [plastic bags in my household] turned into dusty pieces with my own eyes. I don't think it is hard to R&D fast and easy degradable plastic bags. I'm sure someone will find the way to do it in a few years from now." the young adult male sample said.

"Why is it us, citizens, to take action? Why would not it be the responsibility of the government to invest on infrastructures like waste management and recycle units?" was stated by the middle-aged male respondent.

4.1.1.4 Outmodedness

Several respondents, from young adult to middle-aged female, perceived bringing and using their own bags; either made from cloth or other reusable material, when going for grocery shopping as old-fashioned. One of the samples said "I have seen only the aunties or grannies bringing their own bags to the stores for shopping. I think I will feel kind of ashamed if I have to bring it [cloth bags] instead of accepting the store-provided plastic bags."

These findings had underlined and envisioned the status-in-quo, the major unsupportive attitudes continually possessed by Thai consumers about lessening and dismissing the usage of store-provided plastic bags.

4.1.2 Related subjective norms

Information found from the interviewing sessions indicated several social characteristics of the sample size which are in line with the trend of Thai consumers in Bangkok area. All of the studied samples live either with small-sized family, spouse, or live alone. Only a couple of respondents denied the inclination of their shopping decision being dependent on people around them. The rest admitted that their purchasing behavior is significantly influenced by the other members of their household in varied degrees. In term of grocery shopping, substantial impact came from remarkably limited range of close acquaintance rather than just anybody; friends, colleagues, distant relatives, bloggers, store-presenters, and etc.

There were two respondents who have been trying to receive least new plastic bag from the stores as possible. It was unveiled that one of them adopted the behavior from her parent who is a Santi Asoke Buddhist and another from her daughter who had been living abroad where plastic bag tax is applied nationwide.

The data from 25 randomly collected samples exhibited three interesting aspects in which consumers' perception towards store-provided plastic bag usage can be driven by subjective norms.

4.1.2.1 Less people less impact

Almost half of the sample size expressed concern over the intensive plastic bag usage as well as other eco-friendly behaviors that they need more people in order to be successful. Some of the respondents rationalized their indifference towards reducing the use of these plastics by the ineffectiveness due to the small number of activists.

"I have never encountered any shoppers bringing their own shopping bags. Everyone is accepting the plastic ones anew from store staffs. What's the point of only me doing it? No impact could be seen anyway." a female sample shared her thought. Several other responses also displayed the same message.

4.1.2.2 Awkwardness

Another perception related to social aspect revealed was the awkwardness of doing something different. Several female respondents stated that they think bringing own carrier, either multiple-used plastic or cloth bag, to their regular hyper- and/or supermarkets to use instead of new store-provided ones can make them feel alien because nobody else does the same. Couple of the interviewees further emphasized on their reluctance due to the suspicion that other people in the concurrent shopping sphere might view them as weirdo.

"I had tried declining the plastic bags from the cashier once and I felt kind of awkward because no one is doing it." one of the samples stated.

"It must have felt weird carrying and using my own cloth bag. Everybody else is accepting the plastic bags all the time. What will they think of me if I put my shopped goods in my own bag instead of doing the same as them?" another female respondent asserted.

4.1.2.3 Burdensome

There was yet another relevant concept revealed by the studied samples who are continually receiving plastic bags anew. They perceived the using of

any other method in carrying the shopping goods than the store-provided bags as being burdensome to the cashier and also other customers queued behind them in the store.

"Making the cashiers arranging the goods in any other bags but their regular and familiar ones can increase the complexity of their job and slow down the payment process. I don't do it [using cloth bag instead of getting new plastic ones provided by the store] because I'm afraid of being the annoyance to them as well as those who are in line behind me." a middle-aged female respondent admitted. Also several other samples conveyed their opinion in the same direction.

According to the findings classified here, it can be claimed that Thai consumers are not only influenced by their closed peers but also concern about how wider group of members in the society might perceive their actions. This is in accordance with the common trait of Thai consumers in general being rather collectivistic than individualistic. It addressed the significance of such characteristic among the sample size on their behavior of skipping the use of store-provided plastic bags.

--

4.1.3 Perceived behavioral controls

Regular spending of all study's respondents ranged between approximately 800 (eight hundred) up to 2,500 (two thousand and five hundred) THB per one visit to hyper- or supermarket. Most of the interviewees make once or twice grocery shopping trip(s) a week. The store cashiers normally fitted their purchased groceries in five to eight plastic bags on average, and occasionally added two to three more in for doubling the strength in case of carrying heavy goods; such as bottle of liquid seasoning, can of soft drink, large bag of rice, and etc.

The answers gathered from 23 of interviewed respondents who had never before exposed to rejecting the usage of new plastic bags provided by the stores exhibited the perception that, comparing to other environmental friendly actions, bringing their own bag to shopping takes higher level of effort and commitment. The eco-friendly behaviors mentioned included electricity saving, water saving, garbage sorting, and garbage discard in proper place, for examples.

One of the requirements for reducing new plastic bags given out is that the shoppers have to prepare their own carrier(s), such as cloth or reuse plastic bags, prior

to their grocery shopping. This means shoppers who would not like to receive new plastic bags have to plan before every grocery purchasing trip. Thus, it will eliminate the possibility of impulse or unplanned shopping to not incur the use of new store-provided plastic carriers.

"I agree that getting new bags is bad. I have excessive amount of them stored back at my house because I don't want to make more waste. But it still causes unnecessary new production. Yet I cannot deny receiving them because I always forget to bring the cloth bag." one of the female interviewee revealed. When asked further about general shopping behavior, it was found that she normally stop by at the supermarket on her way back from workplace by sudden motive, for example, she stated "sometimes I just came up with the idea for dinner, so I had to drop by here and bought the ingredients. And when you made one journey, no one wants to be back so soon. I ended up buying other groceries and necessities which are out as well."

On the contrary, the research interview had captured a late-adult female sample that has been, for more than 10 years, stocking up her household grocery list without receiving new plastic bags at all. With two cloth bags in hands, she explained "I always have these [cloth bags] folded somewhere in my handbag. No matter where and what I shop, groceries from hypermarket or ready-to-serve foods from wet market. Because no one seems to care at all, so I would like to do the best I could. I wish they have ways to replace other plastic packaging with something more 'eco' soon."

As proposed in the third chapter, the samples were semi-manipulated to have equal proportionated size, consist of both the interviewees who travel to the store by public transportation and those by private vehicles. The result revealed insignificant relevance between consumers' mode of transport and their receiving / rejecting plastic bags behaviors. Because there were respondents from both groups who emphasized the inconveniences of imagined absence of new store-provided plastic carriers.

Initially, the study's result suggested the high possibility of claiming 'convenience' as only one perceived behavioral control factor for declining new storeprovided plastic bags among Thai consumers. However, the research's samples had indicated wide variety of aspects about such convenience based on their subjective detailed shopping situation. A young-adult interviewee yielded "I live high up in the low-rise building without elevator. It would be hard for me to carry my shopped goods up. And what to do with these small separated packaged stuff?" while pointing at her just-bought groceries in several store-provided plastic bags.

"It would not be possible for me to fit all of these in one or two cloth bags", one of female respondents retorted. She further explained that one of her regular shopping destination does not allow customers to bring the cart out of grocery department zone.

"I think it [not receiving new store-provided plastic bags] will be difficult. I normally buy a lot per one time that I don't think everything can be easily transported from here to my car. The" is one of the commensurate statements given by other interviewees.

"I agree and have been trying use less amount of intensive plastic products in everyday life too. But here [at supermarket] is different from 7-11 [a well-known chain of convenient store in Thailand] where I buy only a few stuff per visit, so I always reject the plastic bags from them" another sample compared the conditions between her varied location she regularly stop by for shopping.

Frequently the odds of customers to decline the new plastic bags also depend on the original packaging and size of the goods. "You see a bundle of drinking water bottles, right? Though it is quite heavy, I normally don't want the cashier to put them in the bags. I got no fuss carrying it up and down the bus at all" declared a respondent who claimed herself trying to cause least harm to nature as possible.

Another convenience related barrier discovered by the investigation is the service of stores' cashier itself. One of the research's interviewees revealed "I often felt the staff put my paid goods into excessive amount of bags. Sometimes they put in only a few things and then move on the fill the rest in another and another. It is over-used!"

"Even with the plastic bags, those staffs have never arranged my groceries right! I really cannot imagine them fitting those fragile goods like loaf of bread, vegetables, eggs, and else, in a cloth bag", complaint by an elderly female interviewee. In summary, physical difficulties assembled from the interviews which could potentially prevent Thai consumers from reducing the use of new plastic bags includes the inconvenience relating to; the carrying of goods, the length of walking while carrying, the amount and size of goods, the original package of goods, the store facilities, and lastly, the quality of cashier service.

The aspect of result portrayed here is in accordance with one of the research assumptions indicating that Thai consumers' convenience-seeking aptitude is one of the possible obstructions to their reducing plastic bags usage behavior.

The findings under section 4.1 shows the lack of supportive qualities among Thai hyper- and supermarket shoppers' perception on the usage of storeprovided plastic bags in all three aspects of consumers' intention and behavior according to Theory of Planned Behavior (Ajzen, 1991).

4.2 Affective component of the attitude towards store-provided plastic bags usage

Out of 25 respondents of the study, 21 of them listed waste management as one among eco-problems they do concern. However, as argued earlier, it still has not resonated into behavioral stage due to variety of obstacles. Comparing to air pollution issue, which almost all of the interviewee stated firstly when asked about general view on the world's environment, waste and plastics waste might have less obvious impact on consumers' lives. When asked to give visual example of 'waste problems', several interviewee mentioned the inappropriate garbage disposal in tourism sites where they had visited. As a result, the research samples show such weak engagement people have towards reducing the usage of intensive plastic products behavior.

As the previous sections already hinted, from total sample size of 25 shoppers, the study had encountered only 1 sample that has habitual level of bringing cloth bags to her regular shopping venues to use in place of newly provided plastic bags. The rest of the studied respondents were found to exhibit the intuitively well-reflective to status quo ratio of doers to don'ters for the target behavior, rejecting new plastic bags use. While a couple of them revealed to have been normally trying to

accept least new store-provided bags as they can, another 23 respondents neither show ambition nor have interest in cooperating at all.

The research found that most of the samples still lack of graspable knowledge about the effect their actions have on the ecological prominence. This means the cognitive components of the behavior are as weak as affective components, and, thus, hinder the behavioral stage achievement.

4.3 Additional aspects

There were several related issues mentioned by the respondents during the data collection process which are noteworthy yet cannot be grouped with the predetermined aspects so far, including;

4.3.1 General grocery shopping behaviors

Significant number of research samples admitted they have more than one and up to four stores which they normally stop by for grocery shopping. The result also yielded that the interviewees majorly choose such regular stores based on the location. The hyper- and/or supermarkets have to stand along the shoppers' routine commute for their convenience of transportation. Several other factors the study found to have driven them in selection of one store, as oppose to others, at a time includes products' availability, products' price differences, and, last but not least, promotions.

This finding, in return, allows the opportunity of the customers to stop going to one store simply because they are dissatisfied with a single or a few store conditions. It can then be suggested that, if any single store eliminate the plastic bags give-away and it is perceived negatively in the aspects former illustrated to the customers, they can potentially switch to other chain of stores that has a branch in their convenient area regardless of unique products, attractive prices, and/or appealing promotion.

The study, hence, would like to propose the reducing of plastic bags usage as a widely standardized policy. This is to prevent the loss of revenue to hyper- and supermarket owners. When all interviewees were asked 'What if' question about the 'no-bags' as a nationwide regulation, their opinions radiated from strongly hostile to consensual cooperative. It can be remarked here though such abrupt and aggressive rule may induce resistance among consumers but an obvious pro to it is the ability to be implemented by every store simultaneously and, thus, striking effect.

4.3.2 Lack of environment related knowledge

As formerly mentioned in section 4.2, the research outcome indicated the lack of knowledge and concern towards the behavior of reducing intensive storeprovided plastic bags usage.

Regarding the existing stores' policies on reduction of plastic bags giveaway, the respondents undoubtedly admitted they know about the campaigns, yet the objective had not been clearly communicated and understood. When questioned in relate to government actions, there were only 6 samples yielded they had acknowledged and personally mentioned the policy prohibiting stores from giving out plastic bags to customers one day per month.. However, only half of them could tell the exact date, which is the 15th of every month.

This passage had reaffirmed the lack of adequate information input, knowledge and, hence, concern among Thai consumers towards environmental issues.

4.3.3 Prior acknowledged store's positioning

In Thailand, there is currently at least one chain of mega wholesale store that does not provide free plastic bags for its customers. This point does not go unnoticeable by several research respondents. Several samples stated Makro as one among their regular shopping venues. Though it can be argued that the prior positioning of the store had driven the customers to just take it as it is, the research would like to propose the studying of Makro's shopping sphere in order to understand how it had been encouraging the customers to get use to not receiving new bags at all.

4.4 Summary

The research findings reflected the ineffectiveness of existing campaign regarding the intensive store-provided plastic bags usage so far. Part of the sample size unveiled to have tried once or twice not accepting the plastic bags because of reward point program, albeit they later gave up and reasoned that it was not appealing enough. As a result, this campaign, even though executed by many stores, still has not been resonated into widely visible practice yet.

All aspects of possible obstruction thoroughly clarified earlier in the chapter can be summarized as bullet point contents as shown in the following tables.

Category	Contents
	Ineffectiveness & non-necessity
Attitude towards behavior	Cost of the stores
	 Responsibility of higher sectors
	Outmodedness
1 S 1	Less people less outcome
Subjective norms	Awkwardness
	Burdensome
Perceived behavioral controls	Convenience
Affective component of the attitude	Unapparent impact
Additional aspects	General shopping behaviors
	 Lack of environment related knowledge
	 Prior acknowledged store's positioning

JUE 1 1 1 1 1

Table 4.1 Summary of research findings

CHAPTER V CONCLUSIONS

Under this last chapter, the research is thoroughly concluded yet put greater focus on summarizing the findings and synthesized recommendations for future studies or practical campaign executions. The limitations of this research are also demonstrated within the chapter.

The research was inspired by the obvious infertility of existing government and public policies aiming at reducing the usage of new store-provided plastic bags, though global warming and environmental problems had started to visibly affect people's well-being for a few years now. It was determined to find the potential factors that might have been obstructing such campaigns from practical and substantial reduction effect through investigating Thai consumers in Bangkok area's perception towards the usage of store-provided plastic bags from hyper- and supermarket.

Fundamentally, the secondary information was acquired and analyzed from existing literatures associated with consumers' attitude and behavior in general as well as those specifically focusing on environmental friendly aspects. The Theory of Planned Behavior, Affective Cognitive Consistency theory, and other potential factors, including environmental concern, convenience-seeking behaviour, social influence, and collectivistic, as oppose to individualistic, values, were extracted and adopted as the frameworks for further design main primary research.

There were six hypotheses orchestrated based on the frameworks and concepts derived from literature review. The linkage was depicted in Table 5.1.

The study was further conducted in qualitative method of interviewing. 24 open-ended questions were drawn upon the hypotheses and frameworks outlined prior. Twenty-five interviewees were randomly intercepted during their regular grocery shopping routine in hyper- and supermarkets in Bangkok area and were semi-screened to include 13 shoppers who travel to the store by personal vehicle and another 12 by public transportation.

The result had not only reaffirmed most of the research's hypotheses, summarized in the far right column of Table 5.1, but also suggested several more aspects which could influence the plastic bags reduction campaigns promoted by both government and public organizations; including general grocery shopping behavior, lack of environmental related knowledge, and prior acknowledged store's positioning.

Frameworks & Potential factors	Supporting contents
Theory of Planned Behavior	Ineffectiveness & non-necessity
Street 14	Cost of the stores
	Responsibility of higher sectors
	Outmodedness
	Less people less outcome
	Awkwardness
	Burdensome
	Convenience
Affective Cognitive Consistency Theory	Unapparent impact
	 Prior acknowledged store's positioning
Environmental concern	Ineffectiveness & non-necessity
E	 Lack of environment related knowledge
Convenience-seeking behavior	Convenience
	General shopping behaviors
Social influence	Less people less outcome
	Awkwardness
	Burdensome
Collectivistic versus individualistic values	Less people less outcome
	 Awkwardness

Table 5.1 Summary of research frameworks and supporting contents

5.1 Recommendations

This study would like to suggest that the change in behavior of new plastic bags usage should be implemented from top-down approaches, whilst also have well weaving communication plan, in order to make the purpose clear to the consumers. From responses in section 4.1, an example of the messages that should be conveyed to them is that the cloth bag usage or declining the new plastic bags is something ones can brag about.

As the differentiated motivations and obstructions of each research respondents were apparently showed, for the reduction of plastic bags usage to be successful, there should be at least two sides of strategies conducted in parallel. According to Incentive Theory of Motivation (Ryan and Deci, 2000), there was not cure-all solution for the agenda. A certain way of motivating is only appropriate for using with a certain type of person, not with another.

Significant part of the population can be inspired to reject or reduce getting new plastic bags from stores by the messages reaching to their intrinsic motivation, such as, providing knowledge, make them feel proud or view themselves as society's wellness contributors. Several respondents mentioned that the word 'thank you' said by store's cashier when they declined bags give-away is useful as well. Simultaneously, the monetary type of campaigns is also necessary to attract those consumers who normally consider the extrinsic values of the choices. At last, the study would like to additionally assert that, in order to accomplish the overall lesser usage of these store-provided plastic bags, the short-term and long-term effectiveness aspect of selecting and implementing the solutions is another essential matter which should be emphatically considered.

5.2 Limitations of the research

Due to the time-consuming nature of qualitative interviewing research methods, the data collection was limited by the time-frame of the research. As a result, only strong and significant patterns portrayed by the respondents were selected to be illustrated as the research's findings. There might be more potential factors affecting consumers' behaviour related to store-provided plastic bags that were missed out. The reliability and richness of the result can be enhanced by involving larger number of samples. Another limitation was that the sample size had an inclination to be biased by the interviewees' willingness to participate. All potential respondents were approached and prior informed that the interview would take estimated 20 minutes. This had

1043

driven away shoppers who might have been in a rush and possibly the psychographic group of time-oriented, organized, or not-so-generous consumers.

5.3 Research contribution

5.3.1 Academic contribution

As there was not any qualitative study done about eco-friendly behaviours in Thailand before, this research had explored and systematically present the in depth aspect of consumers' perception towards it. Further study can use the findings of this study as foundations to conduct the quantitative research in order to measure the importance of each factor in relation to others. Another possible angle to look at the agenda is to investigate and identify the efficient solution(s) for short-term and/or long-term result or what factor(s) would substantially trigger immediate consumers' choice at a point of purchase (PoP).

5.3.2 Practitioner contribution

The reduction of store-provided plastic bags is beneficial to stores in two major ways. Firstly, it would reduce the operational cost, including not only the cost of the plastic bags itself but also the value of time used by cashier staff to serve one customer. Second is the positive brand image of being eco-friendly chain of stores, which consequently attract the eco-concern consumer base and achieve the altruism aspect, whilst the store may not lose the existing convenience-seeker customers.

This research result can be utilized in generating the ideas for hyper- and supermarket owners and/or management level employees on how to draw the customers towards receiving less plastic bags, which only makes plastics waste pollution worst. The community of stores can join together to weave the notion into more tangible and feasible mutual project.

REFERENCES

- Abdul, J., Nannu, M. & Muhammad K.R. (2013). Using Plastic Bags and Its Damaging Impact of Environment and Agriculture: An Alternative Proposal, *International Journal of Learning & Development*, 3 (4), Doi: 10.5296/ijld.v3i4.4137.
- Abdul-Muhmin, A.G. (2007). Explaining Consumers' Willingness to be Environmentally Friendly, *International Journal of Consumer Studies*, 31, 237-247.
- AIT/UNEP Regional Resource Center for Asia and the Pacific (2010). Municipal Waste Management Report: Status-quo and Issues in Southeast and East Asian Countries. Retrieved from http://www.rrcap.ait.asia/Publications/ MW_status_quo.pdf.
- Ajzen, I. (1991). The Theory of Planned Behavior, Organizational Behavior and Human Decision Processes, 50 (2), 179-211.
- Balderjahn, I. (1988). Personality Variables and Environmental Attitudes as Predictors of Ecologically Responsible Consumption Patterns, *Journal of Business Research*, 17 (1), 51-56.
- Bang, H.K., Ellinger, A.E., Hadjimarcou, J.S. & Traichal, P. (2000). Consumer Concern, Knowledge, Belief and Attitude toward Renewable Energy: an Application of the Reasoned Action Theory, *Psychology & Marketing*, 17 (6), 449-468.
- Bamberg, B. & Möser, G. (2007). Twenty years after Hines, Hungerford, and Tomera:
 a New Meta-analysis of Psycho-social Determinants of Pro-environmental
 Behaviour, *Journal of Environmental Psychology*, 27 (1), 14-25.
- Bamberg, S. (2003). How Does Environmental Concern Influence Specific Environmentally Related Behaviors? A New Answer to an Old Question, *Journal of Environmental Psychology*, 23 (1), 21-32.
- Bem, D.J. (1970). Beliefs, Attitudes, and Human Affairs. Belmont, CA: Brooks/Cole.

- Catton, W.R. & Dunlap, R.E. (1980). A New Ecological Paradigm for Post-Exuberant Sociology, *American Behavioral Scientist*, 24 (1), 15-47.
- Chan, T.S. (1996). Concerns for Environmental Issues and Consumer Purchase Preferences: A Two-Country Study, *Journal of International Consumer Marketing*, 9 (1), 43-55.
- Conraud-Koellner, E. & Rivas-Tovar L.A. (2009). Study of Green Behavior with a Focus on Mexican Individuals, *iBusiness*, 1 (2), 124–131. doi:10.4236/ ib.2009.12016
- Dansirichaisawat, R. & Suwunnamek, O. (2014). A Comparison of Thai Consumers Purchasing Behavior with the Environmental Characteristics: Electric Appliance Market, *Research Journal of Business Management*, Doi: 10.3923/rjbm.2014.
- Diamantopoulos, A., Schlegelmilch, B.B., Sinkovics, R.R. & Bohlen, G.M. (2003).
 Can Socio-demographics Still Play a Role in Profiling Green Consumers?
 A Review of the Evidence and am Empirical Investigation, *Journal of Business Research*, 56, 465-480.
- Duboise, T. (2013). Thais Asked to Decline One Plastic Bag Per Person Per Day, *Plastic Bag Ban Report*. Retrieved from http://plasticbagbanreport.com/ thais-asked-to-decline-one-plastic-bag-per-person-per-day/.
- Dunlap, R.E. & Van Liere, K.D. (1978). The New Environmental Paradigm, *Journal* of Environmental Education, 9, 10-19.
- Eagly, A.H., & Chaiken, S. (1993). *The Psychology of Attitudes*. Orlando, FL: Harcourt Brace Jovanovich.
- Eagly, A.H., & Chaiken, S. (1995). Attitude Strength, Attitude Structure, and Resistance to Change, *Attitude Strength: Antecedents and Consequences*, 413-432. Hillsdale, NJ: Erlbaum.
- Fishbein, M. & Ajzen, I. (1975). Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Addison-Wesle, Reading, MA.
- Follows, S.B. & Jobber, D. (2000). Environmentally Responsible Purchase Behavior: A Test of a Consumer Model, *European Journal of Marketing*, 34 (5/6), 723–746.

- Global Partnership on Waste Management (2015). Thailand, *Country Needs Assessment Analysis*. Retrieved from http://www.unep.org/gpwm/Informa tionPlatform/CountryNeedsAssessmentAnalysis/Thailand/tabid/106539/.
- Gogte, M. (2009). Are Plastic Grocery Bags Sacking the Environment?, *International Journal for Quality Research*, 3 (4), 363-375.
- Gorton, M., Sauer, J. & Supatpongkul, P. (2009). Investigating Thai Shopping Behaviour: Wet-Markets, Supermarkets and Food Quality, *The 83rd Annual Conference of the Agricultural Economics Society*. Retrieved from http://ag econsearch.umn.edu/bitstream/51054/2/gorton_sauer_supatpongkul45.pdf.
- Granzin, K.L. & Olsen, J.E. (1991). Characterizing Participants in Activities Protecting the Environment: a Focus on Donating, Recycling and Conservation Behaviors, *Journal of Public Policy and Marketing*, 10 (2), 1-27.
- Gupta, S. and Ogden, D.T. (2009). To Buy or Not to Buy? A Social Dilemma Perspective on Green Buying, *Journal of Consumer Marketing*, 26 (6), 376-391.
- Heath, Y. & Gifford, R. (2002). Extending the Theory of Planned Behavior: Predicting the Use of Public Transportation, *Journal of Applied Social Psychology*, 32 (10), 2154-2189.
- Hofstede, G. (1984). The Cultural Relativity of the Quality of Life Concept, Academy of Management Review, 9 (3), 389-398.
- Hofstede, G. (1984). Cultural Dimensions in Management and Planning, Asia Pacific Journal of Management, January, 81-99.
- Kaiser, F.G. & Fuhrer, U. (2003). Ecological Behavior's Dependency on Different Forms of Knowledge, *Applied Psychology: An International Review*, 52 (4), 598-613.
- Kilbourne, W. & Pickett, G. (2008). How Materialism Affects Environmental Beliefs, Concern, and Environmentally Responsible Behavior, *Journal of Business Research*, 61 (9), 885-893.
- Kim, Y. & Choi, S. (2005). Antecedents of Green Purchase Behavior: An Examination of Collectivism, Environmental Concern, and PCE, Advances in Consumer Research, 32, 592-599.

- Kinnear, T.C., Taylor, J.R. & Ahmed, S.A. (1974). Ecologically Concerned Consumers: Who are They?, *Journal of Marketing*, 38 (2), 20-24.
- KPMG (2006). Grocery Retailing in Asia Pacific. Retrieved from https://www.kpmg. com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/Retailing-Asia-Pacific-200610.pdf.
- Loureiro, M., McCluskey, J. & Mittelhammer R.C. (2002). Will Consumers Pay a Premium for Eco-Labeled Apples?, *Journal of Consumer Affairs*, 36, 203-219.
- Mainieri, T., Barnett, E., Vaidero, T., Unipan, J. & Oskamp, S. (1997). Green Buying: the Influence of Environmental Concern on Consumer Behaviour, *The Journal of Social Psychology*, 137 (2), 189-204.
- McCarty, J.A. & Shrum, L.J. (2001). The Influence of Individualism, Collectivism, and Locus of Control on Environmental Beliefs and Behavior, *Journal of Public Policy and Marketing*, 20 (1), 93-104.
- McKinsey&Company (2010). Thailand's Modern Grocery at a Crossroads, CSI Insights Flash. Retrieved from http://www.mckinseyonmarketingandsales.com/sites/ default/files/pdf/CSI_Thailand_A4_CSI_FNL.pdf.
- McKinsey&Company and Ocean Conservancy (2015). *Stemming the tide: Land-based strategies for a plastic-free ocean*. Retrieved from http://www.ocean conservancy.org/our-work/marine-debris/mckinsey-report-files/full-reportstemming-the.pdf.
- Minister of Agriculture and Agri-Food Canada (2012). Modern Grocery Retailing in Major ASEAN Markets (Indonesia, Thailand, Malaysia, Singapore and the Philippines). Retrieved from http://www5.agr.gc.ca/resources/prod/Internet-Internet/MISB-DGSIM/ATS-SEA/PDF/6404-eng.pdf.
- Northern Ireland Assembly (2011). Comparison of Environmental Impact of Plastic, Paper, and Cloth Bags. Retrieved from http://www.niassembly.gov.uk/ globalassets/documents/raise/publications/2011/environment/3611.pdf.
- Rajyalashmi, N. (2014). Green Consumer Behavior of the Educated Segment in India, Journal of International Consumer Marketing, 26, 138-152.
- Rosenberg, M.J.A. (1960). A Structural Theory of Attitude Dynamics. *Public Opinion Quarterly*, 24, 319–341.

- Rosenberg, M.J.A. (1968). Hedonism, Inauthenticity, and Other Goals toward Expansion of a Consistency Theory, *Theories of Cognitive Consistency: A Sourcebook*. Chicago: Rand McNally.
- Ryan, R.M. & Deci, E.L. (2000). Self-determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-being, American Psychologist, 55 (1), 68-78.
- Sanglimsuwan, K. (2012). A Framework for Assessing the Willingness to Pay in Reducing Plastic Bag Use, 1st Mae Fah Luang University International Conference. Retrieved from http://mfuic2012.mfu.ac.th/electronic_ proceeding/Documents/00_PDF/O-SC-D/O-SC-D-007.pdf.
- Sammer, K. & Wüstenhagen, R. (2006). The Influence of Eco-labelling on Consumer Behavior - Results of a Discrete Choice Analysis for Washing Machines, Business Strategy and the Environment, 15, 185–199.
- Schlegelmilch, B., Bohlen, G. & Diamantopoulos, A. (1996). The Link between Green Purchasing Decisions and Measures of Environmental Consciousness, *European Journal of Marketing*, 30 (5), 35-55.
- Schultz, W.P. & Zelezny, L. (1999). Values as Predictors of Environmental Attitudes: Evidence for Consistency across 14 Countries, *Journal of Environmental Psychology*, 19 (3), 255-265.
- Schultz, W.P. & Oskamp, S. (1996). Effort as a Moderator of the Attitude-Behavior Relationship: General Environmental Concern and Recycling, Social Psychology Quarterly, 59, 375-383.
- Shrum, L.J., Lowrey, T.M. & McCarty, J.A. (1994). Recycling as a Marketing Problem: a Framework for Strategy Development, *Psychology & Marketing*, 11 (4), 393-416.
- Singh, N. (2009). Exploring Socially Responsible Behavior of Indian Consumers: An Empirical Investigation, *Social Responsibility Journal*, 5 (2), 200-211.
- Sparks, P. & Shepherd, R. (1992). Self-identity and the Theory of Planned Behavior: Assessing the Role of Identification with 'Green Consumerism', Social Psychology Quarterly, 55 (4), 388-399.
- Stern, P.C. & Dietz, T. (1994). The Value Basis of Environmental Concern, Journal of Social Issues, 50, 65-84.

- Stern, P.C. (2000). Towards a Coherent Theory of Environmentally Significant Behavior, *Journal of Social Issues*, 56 (3), 407-424.
- Tanner, C. & Kast, S. (2003). Promoting Sustainable Consumption: Determinants of Green Purchases by Swiss Consumers, *Psychology & Marketing*, 20 (10), 883-902.
- Taylor, S. and Todd, P. (1995). An Integrated Model of Waste management Behavior: a Test of Household Recycling and Composting Intentions, *Environment* and Behavior, 27 (5), 603-630.
- Triandis, H.C. (1971). Attitude and Attitude Change. New York: Wiley.
- Turner, B. and Sutton, J. (2012). Plastic Bags: Hazards and Mitigation. Retrieved from http://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1082&cont ext=socssp.

