

**THE FACTORS AFFECT PURCHASE INTENTION TOWARDS
THE SUPPLEMENTARY FOOD OF ELDERLY PEOPLE IN
THAILAND**



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THE FACTORS AFFECT PURCHASE INTENTION TOWARDS THE SUPPLEMENTARY FOOD OF ELDERLY PEOPLE IN THAILAND

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ABSTRACT

The aging population is growing faster than the younger age groups. The life expectancy of the aging population is rise up to 84 years' old. Therefore, elder persons should get benefit equally in order to advance their health and well-being. This research focuses on the factors that may affect the intention to buy the supplementary food of elderly people, which are perceived benefit, health consciousness, word of mouth and environmental consciousness. The quantitative research was conducted on 127 samples of elderly persons in Thailand via online questionnaire. According to the findings, perceived benefit, word of mouth and health consciousness are the most important factors that have strong significant relationship with intention to buy.

KEYWORDS: Supplementary Food/ Elderly People/ Aging Population/ Well-being

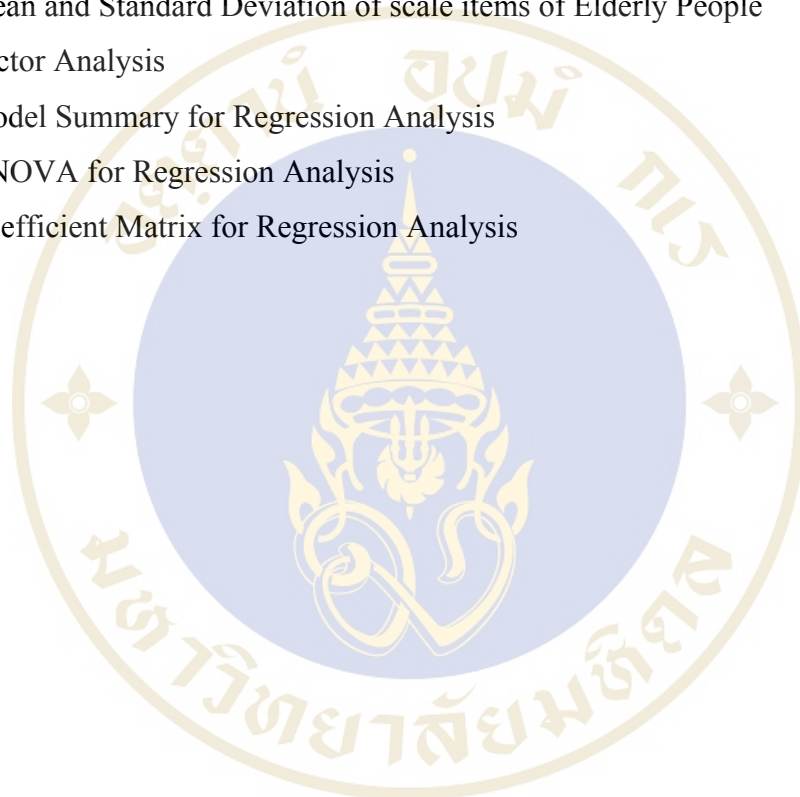
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CONTENTS

	Page
ACKNOWLEDEMENT	ii
ABSTRACT	iii
LIST OF TABLES	v
LIST OF FIGURES	vi
CHAPTER I INTRODUCTION	1
1.1 Background	1
1.2 Objectives	4
1.3 Research Question	5
CHAPTER II LITERATURE REVIEW	6
2.1 Purchase Intention	6
2.2 Perceived Benefit	7
2.3 Health Consciousness	8
2.4 Word of Mouth	9
2.5 Environmental Consciousness	10
CHAPTER III RESEARCH METHODOLOGY	12
3.1 Methodological Approach	12
3.2 Sample and Data Collection	12
3.3 Population	13
3.3 Data Analysis	13
CHAPTER IV DATA ANALYSIS	14
CHAPTER V RECOMMENDATION & CONCLUSION	23
5.1 Conclusions	23
5.2 Recommendations	24
5.3 Limitations and Future Research	25
REFERENCES	26
APPENDICES	28
BIBLIOGRAPHY	32

LIST OF TABLES

Table	Page
1.1 Life Expectancy at birth, by region for selected periods	1
4.1 Personal characteristics of elderly population in Thailand	14
4.2 Mean and Standard Deviation of scale items of Elderly People	16
4.4 Factor Analysis	19
4.5 Model Summary for Regression Analysis	20
4.6 ANOVA for Regression Analysis	20
4.7 Coefficient Matrix for Regression Analysis	21



LIST OF FIGURES

Table	Page
4.3 The top ten factors that affect behaviour of elderly people	18



CHAPTER I

INTRODUCTION

1.1 Background

An aging population is increasing worldwide and it is one of the most significant global challenges. Developed countries are struggling as the proportion of the elder population has increased significantly. According to World Population Prospects (United Nations, 2015), the number of elder population aged 60 years or over has increased considerably over the decades in most countries and regions by mid-century. The elder population are expected to rise from 962 million to 2.1 billion by 2050, which is over double of 2017. Moreover, the elder population are expected to rise more than triple and reach 3.1 billion persons by 2100. Globally, the aging population is growing faster than younger age groups. The aging population is not only elder people, but it is also about people living longer lives (Arnold, 2006). Moreover, the cost of health care expenditures is increasing in the same direction (Breyer et al., 2010).

According to the research of the World Economic Forum (2018), life expectancy is increasing globally. Table 1 shows the number of global life expectancy at birth during 1990-2100. During 1990 to 2030, the average age of the population rises by 8 years. From 2045 to 2050, life expectancy is projected to rise to 77 years and from 2095 to 2100, it significantly rises to 83 years old.

Table 1.1 Life Expectancy at birth, by region for selected periods

Region/area	1990- 1995	2005- 2010	2010- 2015	2015- 2020	2025- 2030	2045- 2050	2095- 2100
World	64.6	69.1	70.8	71.9	73.8	76.9	82.6
Africa	51.7	57.0	60.2	62.4	65.7	70.9	78.4
Asia	65.2	70.3	71.8	72.9	74.6	77.5	83.5
Europe	72.7	75.3	77.2	78.1	79.8	82.8	89.3

The aging population is growing much faster in developing countries than in developed countries. There is three times the speed of populations in developed countries. It reflects that fertility is declined. Currently, developing countries show one in ten of the population aged over 60 years old and it is predicted that senior citizen will be one in five of the population in 2050.

From 2017 to 2050, the elder population in developing countries tend to increase twice from 652 million to 1.7 billion persons. While the elder population in developed countries is projected to increase by 38 percent, from 310 million to 427 million persons (World Health Organization, 2018).

Elder persons should be considered in development planning, emphasizing that older persons should be able to participate in and get benefit equally in order to advance their health and well-being and that societies should provide enabling environments for them. As populations become increasingly aged, it is more important than ever that governments are supposed to design innovative policies and public services specifically targeted to older persons to concern about the changing human condition in which more people can plan for a longer and healthier life with consequences for their behavior.

1.1.1 Aging Population in Asia

Asia is the world highest of aging society (United Nations, 2006). Demographic profile of Asia is especially reshaped by the rapid increase of aging population than anywhere. Over the decades, Asia is the continent that has the oldest population (The Jakarta Post, 2018). In 2017, the ASEAN population aged over 60 is estimated at 59 million, or 9 percent of the total population.

Elder population in Japan and the Republic of Korea significantly increase more than other countries in Asia. Japan has the most elder population at 33.1 percent of the total population. By 2030, it tends to grow at 37.3 percent. The second country that has fast increased in the aging population is the Republic of Korea. The elder population of the Republic of Korea are predicted to increase from 18.5 percent to 31.4 percent in 2030. Thailand is the third place in Asia that the aging population is growing fast. Thai elder population are projected to grow at 26.9 percent in 2030; therefore, one of the fourth population will be a senior citizen. Other developing countries are also in

trends. Reduced mortality has gone hand in hand with a reduction in fertility. These factors together have resulted in increasing numbers of the elder population. Population aging will have the greatest future impact in Asia (Government of India, 2016).

1.1.2 The Definition of Aged Society

According to the World Health Organization (WHO), there is a difference between the aging society and aged society. WHO states that a person aged 60 or over is called “Aging rate”. If the society’s aging rate exceeds 7 percent, it is an “Aging Society”. “Aged Society” is rate over 14 percent. Last is “Super-Aged Society” is rate over 21 percent. Thailand uses the aged of 60 defines as old people, which is the age of retirement (Thai National Statistical Office, 2007).

1.1.3 The Situation of Aging of The Thai Population

Currently, Thailand is ranked the third most rapidly growing in the aging population. In 2019, the Thai population is expected to be 66.3 million, which can be divided into male 32.0 million and female 34.3 million. According to Mahidol Population Gazette Population Distribution by age group (2019), the largest population in Thailand is the labor force in the range of 15-59 years as 65.5 percent of its population. The second is an elder citizen, which is in a range of 60 years or over as 17.4 percent. While the smallest amount of the population is children, which is in range of under 15 years as 17.1 percent.

According to the United Nations Department of Economic and Social Affairs, in 1950, the Thai population has a large proportion of younger age which indicates the population has high fertility rates and low average life expectancies.

The United Nations reports that the growth of the aging population is relatively high and over 3 percent per year. The proportion of the aging population essentially increases from 5 percent (1 million people) in 1950 to 17 percent (11.7 million people) in 2017. In 2050, the aging population is expected to be 35 percent (22.9 million persons). With the growth rate of 3-3.6 percent per year, the size of the aging population has doubling times in 19-23 years.

Thailand becomes a full-fledged aging society when the number of aging population reach 13.1 million in 2021 (The Nation Economic and Social Development

Board, 2018). The life expectancy of Thai citizen is expected to increase from 55.2 to 69.9 years for men and 61.8 to 74.9 years for women. Consequences of the past show that the high fertility level and declines of mortality results in the rapid increase in the older population aged 60 and over (World Population Review, 2019).

The opportunities for a longer life are impacted by healthy aging-related behaviour in term of good nutrition and active levity. Increasing longevity has affected economic growth and opportunities to personal fulfilment. The older population are healthier than the past generation. Advances in bioscience offer better medical treatment for the prospect of healthier. The growth of the older population represents a dynamic consumer and human capital resource. Many businesses find the opportunities to create innovation as well as to maintain and to develop the markets and all stakeholders (Paul & Arille, 2018)

1.2 Objectives

The purpose of this study is to understand the purchase intention of supplementary foods in the aging society and to identify the factors that affect the purchase intention among the aging population. There could be many factors such as perceived benefit, health consciousness, word of mouth, and environmental consciousness that affect the elderly people to intention to buy the supplementary food.

This study would benefit the brand and manufacturer that Results of this study can contribute to a deeper understanding of the intention to purchase supplementary foods among the senior people. Also, a guideline to develop the product responds to the consumer's demand and to reach the potential customer with the content which interesting in elderly people. Marketers can be present the product in the way the elderly prefer. Moreover, to be the benefit for the elderly people in Thailand to receives the innovative products that respond to the demand of consumer, which could help to solve their physical problem with the aims to maintain and to improve their healthy lifestyle and well-being. For the brand sector as a source of information and reference in the development of products as well as opening pathways for the aging population market.

1.3 Research Question

Q1. What are the most important factors influencing Thai elderly to purchase the supplementary food in Thailand?

Q2. What are the most underlying factors that affect behaviour of elderly people on selecting the supplementary food?



CHAPTER II

LITERATURE REVIEW

2.1 Purchase Intention

Purchase intention is the preference of consumer to buy the products. It is a situation where consumer tends to buy a certain product in a certain condition (Morine et al., 2007). Gogoi (2013) states that purchase intention may be changed by the influence of price or perceived quality and value. The survey shows that product quality has a significant and positive effect on purchase intention (Jalilvand et al., 2011). Similarly, the effect of consumer perception of price fairness on the purchase decision of consumer and leads us to predict for purchase decision of consumer (Lee et al., 2010).

Relationship quality is one of the main factors that affect the level of purchase intention. Therefore, when the relationship reflects direct experience is expected to lead to the more positive impact of relationship quality on purchase intention and strongly impact of intention on purchase behavior (Helene & Canniere, 2019). Previous studies on the influence of brand image on consumers' purchase intention show a significant relationship between these variables (Arslan & Altuna, 2010).

Attitudes and emotions also effect on purchase intention. The study of Liu & Chu (2012) shows that intention to use is a positive relationship with an attitude involved feeling, moods, and emotion toward the service provider. Also, Witt (1969) states that information about the brand can affect the decision-making process. When buyers are willing to buy, it represents the buyer to have a purchase intention which is the positive relationship between the willingness to buy and perception of value (Dodds et al., 1991). Flahery and Papps (2000) believe that attitude towards a core-brand is the critical factor in determining this purchase intention toward the extended product. Thus, the core brand is related to consumers' purchase intention (Ghen and Liu, 2004).

There are six states before buying the products which are awareness, knowledge, interest, preference, persuasion, and purchase (Kotler & Armstrong, 2010). The research conducted by Satish & Peter (2004) explains that the knowledge of the

product as the integrity role in the purchase decision. Holt (2001) defines that purchase intention is the relationship between products and consumers. Attractive packaging of the product is the important factors that have an influence on consumer purchase intention and persuades consumers to purchase (Ann, 2008).

2.2 Perceived Benefit

Perceived benefit refers to that perception of the positive consequences (Gellman & Turner, 2013). There are five models that are explained by the researchers about the performance of health behavior which related to the perceived benefit. First, Becker (1974) defines that perceived benefit is one of the main factors that can predict health behavior. Second, Prochaska & DiClemente (1986) describes that the Transtheoretical Model is the progress of change depends on the weighted between perceived benefits and barriers. Third, the protection of motivation theory by Rogers (1983) defines that intention to protect depends on four cognitions which is the perceived efficacy include benefit. Fourth, the theory of reasoned action (Fishbein & Ajzen, 1975). Fifth, the last model is the theory of planned behavior (Ajzen, 1985). They mention that a person's behavior is the driver of attitude about behavior.

The perceived benefit provides value to the products and involves consumer's information search to guide the decision-making to avoid uncertainty. Arora & Aggarwal (2018) states that perceived benefit as the positive outcomes and perception through the action consisting of three benefits which are convenience benefit, price benefit, and recreational benefit. In addition, the attitude of perceived benefit is influenced by functional and nonfictional benefit. The functional is a utilitarian benefit while nonfictional is emotional (Bhatnagar & Ghose, 2004). Sedighi & Lukosch (2017) defines perceived benefit as an individual expected outcome influenced by person value and social value. In the study of Organic food industry, organic food is mainly sold for people who concern about health benefit (Shedhered, Richard, Magnusson & Rivera, 2005). Moreover, the consumer who concerns to perceive benefit is willing to pay in the higher price (Brugarolas & Rivera, 2005). As the perceived benefit is one of an important factor in decision-making. It makes the consumer comparing quality among

the products and price by (Jin & Suh,2005). Zhang & Tan (2012) states quality has a direct impact on decision-making. If the company cannot deliver the standard quality of products. It means that the company cannot deliver benefits as well. In this context, perceived benefit is an important role in decision-making and can be measured from the level of satisfaction over the products.

2.3 Health Consciousness

Health consciousness refers to the individual tends to undertake health actions (Becker & Maiman, 1977). Gould (1988) states that health consciousness has four dimensions. The first dimension is people who greater concerns to health. The second is people who care about health. The third dimension is people who engage in the health information search. The last dimension is people who concern healthy condition value. To maintain and develop a healthy lifestyle, a good dietary meal is very important, especially a function meal.

People are aware of wellbeing and seek to improve and maintain the level of health. People willing to actively engaging in health preventive behaviors through explore health information and consume healthy food (Ahadzadeh, Sharif & Sim, 2018). Hsu, Chang, & Lin (2016) states that health consciousness has a positive effect on the consumer intention to purchase food product. Roynes et al. (2014) state a relationship between health consciousness and attitudes toward supplements. Divne & Lepisto (2005) defines health conscious as the individual behavior in consuming the food and in doing physical activities. Moreover, Mergman (2004) mentions that it is the way people taking care of their health condition through implementation. Chae, Jiyoung, & Brian (2015) states that people are searching for health-related information for their proper health orientation. According to the research of Ajzen (1985), the individual will undertake some action upon their attitude which can be favorable and unfavorable to perform a specific action.

Health consciousness has often been investigated as an antecedent of health behavior (Wen & Li, 2013). Hong (2009) defines health consciousness concept comprised of three elements consists of self-health awareness, personal responsibility,

and health motivation. Chen (2011) examines the relationship between health consciousness and healthy lifestyle. Health conscious consumers tend to study health-related issues and seek health information and are found to take preventive actions such as exercise or consume dietary supplements (Michaelidou and Hassan, 2008). Forthofer and Bryant (2000) state that consumers who are more health conscious are considered “targets of greatest opportunity” because they are more likely to be ready to engage in healthy behaviors. Health-conscious consumers tend to use more supplements to improve their health. However, they may not be aware that such products are not truly regulated (Quinones et al., 2013). They may be unaware that supplements are not always natural, and that some of these products actually include ingredients found in prescription drugs (Eliason et al., 2012; Tsai et al., 2012). In this context, health conscious tend to have an intention to buy and use health and wellness service activity.

2.4 Word of Mouth

Word of mouth (“WOM”) is a major influence on what people know, feel and do (Thonssen & Beard, 1948). Britt (1966) defines that they are the relationship between consumer behavior theory and the social sciences point out the impact of WOM. Similarly, WOM as oral and person to person communication between receivers and communicators whom the receiver perceives (Arndt, 1967). WOM can be either positive or negative which play an important role in creating a perception which affects the customer intention to buy and the consumer’s selection (Kitapci, Akdogan & Dortyol, 2014). According to the studies of Gretzel & KH Yoo (2008), WOM is the written information and the recommendation of the products from the consumer perception. Goldenberg et al. (2001) state that WOM from customers has a strong influence on the decision-making process.

WOM is an effective key driver in viral marketing to create brand awareness and interest in the products (De Bruyn & Lilien, 2008). Chatterjee (2001) states that WOM message allows the customer to obtain information about the products and services. It influences the purchase intention and the consumer decision-making. Westbrook (1987) describes WOM as the informal communication which informs other

consumers about the utilization and quality of products. By the usage of internet technologies, Kudeshia & Kumar (2017) defines WOM as the content generated by users to offer the product information and consumption-related recommendation through social networking. In this context, Word of mouth as the tool to build the awareness, interest, and trust to customer. This tool influence very effective in advertising. WOM is the satisfied customer communicating with the prospect.

2.5 Environmental Consciousness

Environmental consciousness is an element of belief system denotes to specific psychological influences related to individuals; tendency to engage in pro-environmental behavior of consumer (Kautish & Sharma, 2018). As an element of individual belief system, environmental consciousness offers a multidimensional concept consisting of cognitive, attitudinal and behavioral (Schlegelmilch et al., 1996). The main dimension of a cognitive level is understanding subjective knowledge by the consumer about the environmental consequences of human actions (Dembkowski & Lloyd, 1994). Environmental knowledge defines as a general knowledge of facts, concepts, and relationships which could define the level of problems (Fryxell & Li, 2003).

Schahn & Holzer (1990) states that environmental consciousness can be classified into abstract or concrete environment knowledge (Schahn & Holzer, 1990). Abstract knowledge refers to knowledge about the environmental issue: problems, causes, and solutions. The concrete knowledge related to behavioral in term of utilization and action. Stern (1992) identifies four different environmental orientations as the indicator of environmental concern, the first dimension is the new environmental paradigm (Dunlap et al., 1978). The second orientation is anthropocentric altruism that people care about the quality of the environment because they believe in the threat of people's health. The third orientation is about to express the self-interest. Finally, the function of deeper caused which is a religious belief or post-materials values that affected the various dimension of new environmental paradigm. Moreover, environmental concern is an indicator to evaluate the attitude toward facts, oneself behavior, others behavior with consequences for the environment (Weigel, 1983).

People who concern on the environment will sensitive to purchase certain goods because they are environmentally hazardous by-products (Mishal & Dubey, 2017). Buysse & Verbeke (2003) mention that the firms associated with stakeholders tend to execute environmental strategies proactively and the way executive managers perceive environmental issue depend on broad of stakeholder needs.



CHAPTER III

RESEARCH METHODOLOGY

3.1 Methodological Approach

The quantitative method is used in this study. The assumption was made on the factor influencing the purchase intention about supplementary food among senior citizen in Thailand. The paper questionnaire was conducted and the questionnaire was divided into parts. The first part to the four-part was designed to study all of the following factors; Perceived Benefit, Health Consciousness, Word of Mouth, and Environmental Consciousness. The second part is the demographic information of the respondent. This is to know the respondent's background and to categorize the respondents.

3.2 Sample and Data Collection

A survey was conducted to collect data to measure all constructs. The questionnaire was initially developed in English, then translated into Thai and back translated into English. Participants were senior citizen in Thailand. Elderly population are an important future market for supplementary food for several reasons: they are establishing the longer life and fulfil the health.

Research questionnaire is developed from the research framework which described under literature review. The questionnaire was given out to the respondents in the form of a web-based survey, which was posted on the internet through mobile-phone and mobile-commerce multi-person chatroom. Respondents are selected on the basis of convenience sampling method. There is no specific demographic area or specific time of the day to collect the data. The participant is provided a short summary of the purpose of the study before filling the questionnaire by the screening question. Although the data came from the internet platform. I can collect a total of 127 responses from Thai were gathered which all the range of Thai population in term of age,

education, and monthly income. The survey consisted of 4 independent variables via 18 questions with 4-point Likert scales (from 1= strongly disagree to 4=strongly agree).

3.4 Population

The empirical study carries out the supplementary foods purchase intention among senior citizen in Thailand. The scope of the target population in this study focused on Thai senior in both male and female aged 60 years or over. The population for this research are the elderly in Thailand around 11,587,000 people according to the Mahidol Population Gazette, 2019. The sampling size of this study is 127 including both male and female who are Thai citizen and currently live in Thailand.

3.4 Data Analysis

The collected data are analyzed using pivot table in Excel and ANOVA in SPSS. First, the collected data are analyzed descriptively to explore the frequency of gender, age, education and monthly income. The top ten means factors are calculated to identify the factors from most important to least important that affect the behavior of elderly people on selecting the supplementary food. Next, the factor analysis is to cut the cross loading of questions and explore new variable. Finally, regression analysis is run on the data to identify the factor that affect the intention to buy and understand the important of factors. There is a strong significant relationship with intention to buy at 95% of confidence level or significance value is less than 0.05.

CHAPTER IV

DATA ANALYSIS

Table 4.1 represents the variable ‘Gender’ has two possible qualitative categories, male and female. The data were collected by surveying 127 respondents, and observe that 58 respondents (45.7%) are male and 69 respondents (54.3%) are female. The majority of the respondent is in the range age of 60-69 years’ old; 122 respondents (96.1%). 2 respondents (1.6%) are in the range age of 70-79 years’ old and 3 respondents (2.4%) are more over 80 years old. The education is categorized into 4 groups; High school, Bachelor’s degree, Master degree or above. The majority of respondents graduated from Bachelor’s degree; 64 (50.4%) and 45 respondents (35.4%) are graduated from Master degree or above educational background. Some of them graduated from high school; 18 (14.2%). The monthly income is categorized into 5 groups; below 15,000 THB, 15,001-45,000 THB, 45,001-60,000 THB, 60,001-80,000 THB and more over 80,000 THB. 48 respondents (37.8%) has the range of income of 15,001-45,000 THB which is the majority. 35 respondents (27.6%) has the range of income of more over 80,000 THB. The range of income between below 15,000 THB and 60,001-80,000 THB have the same number of 17 respondents (13.4%). 10 respondents (7.9%) has the range of income of 45,001-60,000 THB

Table 4.1 Personal characteristics of elderly population in Thailand

	Frequency (Person)	Percent
<i>SEX</i>		
Male	58.0	45.7
Female	69.0	54.3
<i>AGE</i>		
60-69 years’ old	122.0	96.1
70-79 years’ old	2.0	1.6

Table 4.1 Personal characteristics of elderly population in Thailand (cont.)

	Frequency (Person)	Percent
More over 80 years' old	3.0	2.4
<i>Education</i>		
High School	18.0	14.2
Bachelor Degree	64.0	50.4
Master Degree or above	45.0	35.4
<i>Monthly Income</i>		
Below 15,000 THB	17.0	13.4
15,001 - 45,000 THB	48.0	37.8
45,001 - 60,000 THB	10.0	7.9
60,001 - 80,000 THB	17.0	13.4
More than 80,000 THB	35.0	27.6

Table 4.2 represents the mean and standard deviation of the scale statements used in the questionnaire (1=Strongly Disagree, 2=Disagree, 3=Agree, 4=Strongly Agree) of Elderly People.

According to the perceived benefit, the factor which is the most agreement while using supplementary food has the highest score of mean is “using a supplementary food would enhance the health” (2.7874). The following factor is “using supplementary would stay healthy longer” (2.6220). On the other hand, the table shown that the lowest score of mean is “Using supplementary food would enjoy life more” (2.5039). Then “Using supplementary food would reduce the risk for illness” (2.5669).

Refer to health consciousness, the highest score of mean shown that “I worry that there are harmful chemicals in my food” (3.2205) is the top score in this part. The following factor is “I am interested in information about my health” (3.1890). The next one is “I usually read the ingredients on food label” (3.1575). On the other hand, the lowest score of mean is “I am concerned about my drinking water quality” (2.9213). The second is “I read more health-related articles than I did 3 years ago” (3.1024).

From the result, the elderly more concern about harmful chemical in food which is related to the environmental consciousness factor as “Reduce the use of artificial fertilizers in agriculture” also the highest score of mean.

Refer to word of mouth, the highest score of mean shown that “I would find review before making purchase decision” (2.8976). The following factor is “I would recommend products to someone who seeks my advice” (2.7638). On the other hand, the lowest score of mean is “I would decide to purchase if my friend has already purchase” (2.2205). The next one is “Surrounding people have effect on my purchasing decision” (2.5748).

The result shown that the intention to buy in elderly people is not related with surrounding people because they have different health concern. But, they might find the interested content and match with their health concern.

Refer to environmental consciousness, the highest score of mean shown that “Reduce the use of artificial fertilizers in agriculture” (3.3071) which the most impact on the intention to buy. The following factor is “It is important to me that the products I use do not harm the environment” (3.0630). On the other hand, the lowest score of mean is “I tend to buy and use the product that can be recycled” (2.8740). Next is “Humans have the right to modify the natural environment to suit their needs” (2.9764).

The result shown that elderly people is concern the environment in term of reduce the use of artificial fertilizers in agriculture and do not harm the environment.

Table 4.2 Mean and Standard Deviation of scale items of Elderly People

	(n=127)	
	Mean	Standard Deviation
<i>Perceived Benefit</i>		
Using a supplementary food would enhance my health	2.79	0.60
Using a supplementary food would stay healthy longer	2.62	0.64
Using a supplementary food would reduce the risk for illness	2.57	0.65
Using a supplementary food would enjoy life more	2.5	0.70
<i>Health Consciousness</i>		
I worry that there are harmful chemicals in my food	3.22	0.67
I read more health-related articles than I did 3 years ago	3.10	0.60
I am interested in information about my health	3.19	0.59

Table 4.2 Mean and Standard Deviation of scale items of Elderly People (cont.)

	(n=127)	
	Mean	Standard Deviation
I am concerned about my drinking water quality	2.92	0.66
I usually read the ingredients on food label	3.16	0.62
<i>Word of Mouth</i>		
Surrounding people have effect on my purchasing decision	2.57	0.76
I would decide to purchase if my friend has already purchase	2.22	0.77
I would find review before making purchase decision	2.90	0.75
I would recommend products to someone who seeks my advice	2.76	0.68
<i>Environmental Consciousness</i>		
Humans have the right to modify the natural environment to suit their needs	2.98	0.65
Reduce the use of artificial fertilizers in agriculture	3.31	0.66
It is important to me that the products I use do not harm the environment	3.06	0.61
I tend to buy and use the product that can be recycled	2.87	0.67

Table 4.3 represents the mean and standard deviation of each scale items of the top ten factors that affect behavior of elderly people on selecting the supplementary food. According to the table, when ranking the score from the highest to the lowest score to see the overall. The highest score of mean is “Reduce the use of artificial fertilizers in agriculture” (3.31). Following factor is “I worry that there are harmful chemicals in my food” (3.22). Next is “I am interested in information about my health” (3.19). Then, “I usually read the ingredients on food label” (3.16). the last of top five is “I read more health-related articles than I did 3 years ago” (3.10). Majority of elderly people are agreed with the health consciousness and the environmental consciousness.

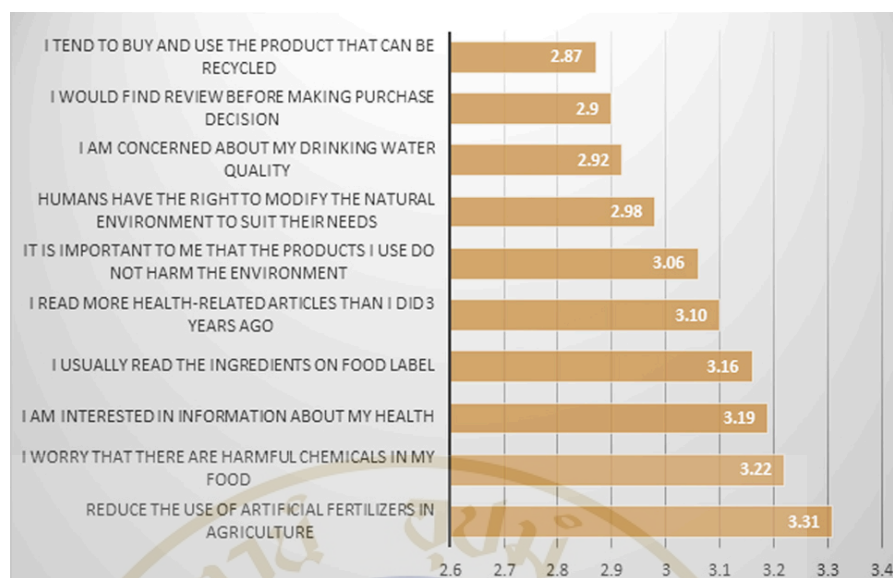


Figure 4.3 The top ten factors that affect behaviour of elderly people on selecting the supplementary food

Moreover, to reduce the information in a model by reducing the dimension of the survey observations and explore the new variable. In this study has 18 initial questions and represent 4 independent variables. There are 5 components; I read more health-related articles than I did 3 years ago, I usually read the ingredients on food label, I am concerned about my drinking water quality, I worry that there are harmful chemicals in my food and I am interested in information about my health as Health Consciousness. The second component has 4 variables; Using a supplementary food would stay healthy longer, using a supplementary food would enhance my health, using a supplementary food would reduce the risk for illness and using a supplementary food would enjoy life more as Perceived Benefit. The third component has 4 variables; Reduce the use of artificial fertilizers in agriculture, it is important to me that the products I use do not harm the environment, Humans have the right to modify the natural environment to suit their needs and I tend to buy and use the product that can be recycled as Environmental Consciousness. For the fourth component has 2 variables which are I would recommend products to someone who seeks my advice and I would find review before making purchase decision as Word of Mouth. The last component as the new variable which named related to WOM. There have 2 variables; I would decide to purchase if my friend has already purchase and surrounding people have effect on my purchasing decision as Influencer.

Table 4.4 Factor Analysis

	Component				
	1	2	3	4	5
I read more health-related articles than I did 3 years ago	.759				
I usually read the ingredients on food label	.747				
I am concerned about my drinking water quality	.650				
I worry that there are harmful chemicals in my food	.638				
I am interested in information about my health	.576				
Using a supplementary food would stay healthy longer		.894			
Using a supplementary food would enhance my health		.807			
Using a supplementary food would reduce the risk for illness		.710			
Using a supplementary food would enjoy life more		.682			

Table 4.4 Factor Analysis (cont.)

	Component				
	1	2	3	4	5
Reduce the use of artificial fertilizers in agriculture			.782		
It is important to me that the products I use do not harm the environment			.701		
Humans have the right to modify the natural environment to suit their needs			.689		
I tend to buy and use the product that can be recycled			.473		
I would decide to purchase if my friend has already purchase				.850	
Surrounding people have effect on my purchasing decision				.844	
I would recommend products to someone who seeks my advice					.859
I would find review before making purchase decision					.622

Table 4.5 Model Summary for Regression Analysis

Model	r	r square	adjusted r square	Std. Error of the Estimate
1	.606 ^a	0.37	0.34	0.61
2	.606 ^b	0.37	0.35	0.61
3	.605 ^c	0.37	0.35	0.61

Table 4.6 ANOVA for Regression Analysis

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.35	5.00	5.27	14.05	.000 ^b
	Residual	45.38	121.00	0.38		
	Total	71.73	126.00			
2	Regression	26.35	4.00	6.59	17.70	.000 ^c
	Residual	45.39	122.00	0.37		
	Total	71.73	126.00			
3	Regression	26.27	3.00	8.76	23.69	.000 ^d
	Residual	45.46	123.00	0.37		
	Total	71.73	126.00			

According to the regression analysis, the p-value is 0.05 which is lower than 0.05. These representing that perceived benefit (0.00), health consciousness (0.02) and word of mouth (0.00) are significant relationship with intention to buy. So, the following hypothesis is accepted.

Based on the standardized coefficients of beta, perceived benefit has the most important factor that impact to the intention to buy because the beta is the highest among others which is 0.42. Word of mouth is the second impact to the intention to buy which the beta is 0.25. The lowest variable is health consciousness which the beta is 0.19.

Table 4.7 Coefficient Matrix for Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		b	Std. Error	beta		
1	(Constant)	-0.63	0.46		-1.36	0.18
	Perceived Benefit	0.62	0.12	0.43	5.25	0.00
	Health Consciousness	0.33	0.15	0.20	2.24	0.03
	Word of Mouth	0.27	0.08	0.25	3.26	0.00
	Influencer	0.01	0.10	0.01	0.12	0.90
	Environmental Consciousness	-0.06	0.14	-0.04	-0.44	0.66
2	(Constant)	-0.62	0.46		-1.37	0.18
	Perceived Benefit	0.62	0.12	0.43	5.39	0.00
	Health Consciousness	0.34	0.14	0.21	2.36	0.02
	Word of Mouth	0.27	0.08	0.25	3.36	0.00
	Environmental Consciousness	-0.06	0.14	-0.04	-0.44	0.66
3	(Constant)	-0.69	0.43		-1.58	0.12
	Perceived Benefit	0.61	0.11	0.42	5.45	0.00
	Health Consciousness	0.31	0.12	0.19	2.47	0.02
	Word of Mouth	0.27	0.08	0.25	3.35	0.00

CHAPTER V

RECOMMENDATION AND CONCLUSION

5.1 Conclusions

According to the regression analysis, there is a relationship between perceived benefit and the intention to buy. The perceived benefit construct is included in many health behavior models (Hochbaum, 1958). When they are satisfied with the outcomes, the perceived benefit has a positive impact on the intention to buy. Also, when they are satisfied with outcomes, they will create word of mouth to the others. This is a free form advertisement that shared by customer experience and influences the right customer. This study shows that word of mouth has a positive impact on the intention to buy. health consciousness has a positive impact on the intention to buy. In this study, perceived benefit is the important factor that strongly related to intention to buy which mean elderly people concern on the specific positive outcomes from specific behaviour. The next important factor is word of mouth. The person who would accept the recommended health action if it was perceived as beneficial. It can strongly influence on the decision-making process and effect on other perception. The third important factor is health consciousness. From the previous study defines that to maintain and develop a healthy lifestyle, a good dietary meal is very important, especially a function meal. People who range of age over 60 years old will concern on consumption with good nutrition and to decrease the risk of certain disease outcome or to cure the illness. Health consciousness is a positive impact on the intention to buy.

This study achieved the objective in term of identification of the factors affecting the intention to buy supplementary food in elderly people. Each variable is identified understanding toward the respondent's insight in term of gender, education and monthly income in order to develop the inventing new product or develop the existing products and marketing strategy to response the customer want and need. The influencer and environmental consciousness were not significant predictors of intention to buy because elderly people didn't make the decision from an influencer who persuade

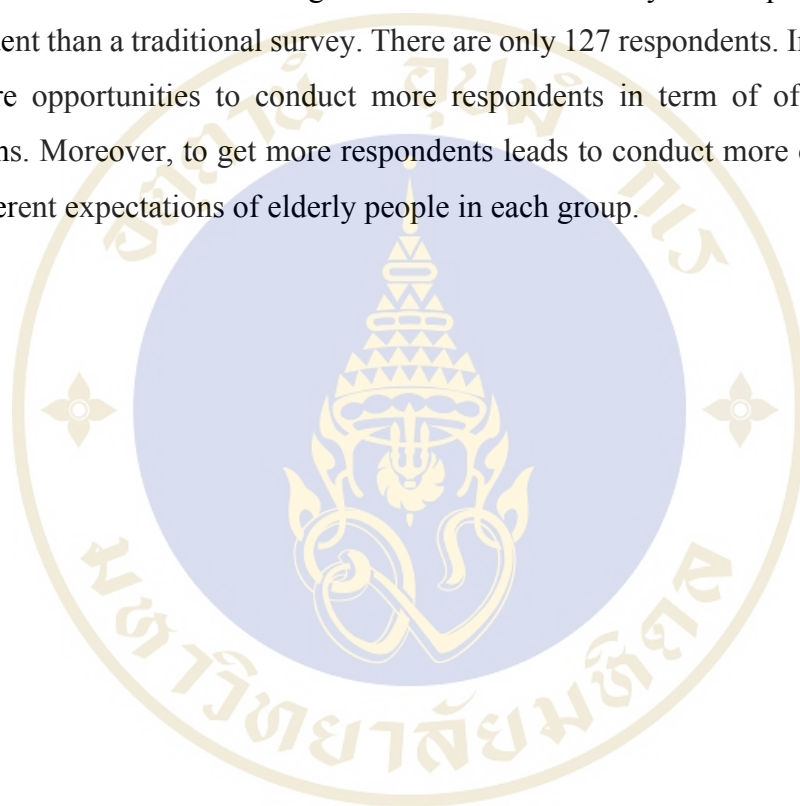
to buy but they will search the product information from the real experience. Also, environmental consciousness is no significant relationship with the intention to buy. On the other hand, referring to the top ten important factors of the mean are about environmental consciousness and health consciousness which means the customer is more interested in the environmental contents in term of marketing strategy to attract the customer. Elderly people prefer to support the recycled product and reduce the use of artificial fertilizer products.

5.2 Recommendations

In the recommendation, I would suggest producing the organic product which contains several vitamins or offering the benefit which interesting in the elderly group and presents the products in the way of green environmental issue. Moreover, the company can use corporate social responsibility (CSR) to promote the reputation and gain more competitor advantages. The results have shown that customer prefers to buy from a responsible company such as create the products which can be recycled and reduce the use of artificial fertilizer products. Another major is customer satisfaction which leads to word of mouth and a good way to do organic marketing. People trust in word of mouth more than direct sales. This can create an intention to buy supplementary food to the potential customer. Referring to the top ten factors that affect the behavior of elderly people on selecting the supplementary food, the company need to provide the content which related with health tips because elderly people prefer to collect the general health knowledge and the benefit of the products to share among their friends and their family. The easier to assess the information is to create the application or website to increase subscribers. The good way to do visual marketing be able to share via application. Otherwise, it can be the way that the company can build a relationship with the customer and be loyalty for the brand. When marketing and operation flowed in the same way throughout the organization. The result is the campaign which affects brand image, sales and social.

5.3 Limitations and Future Research

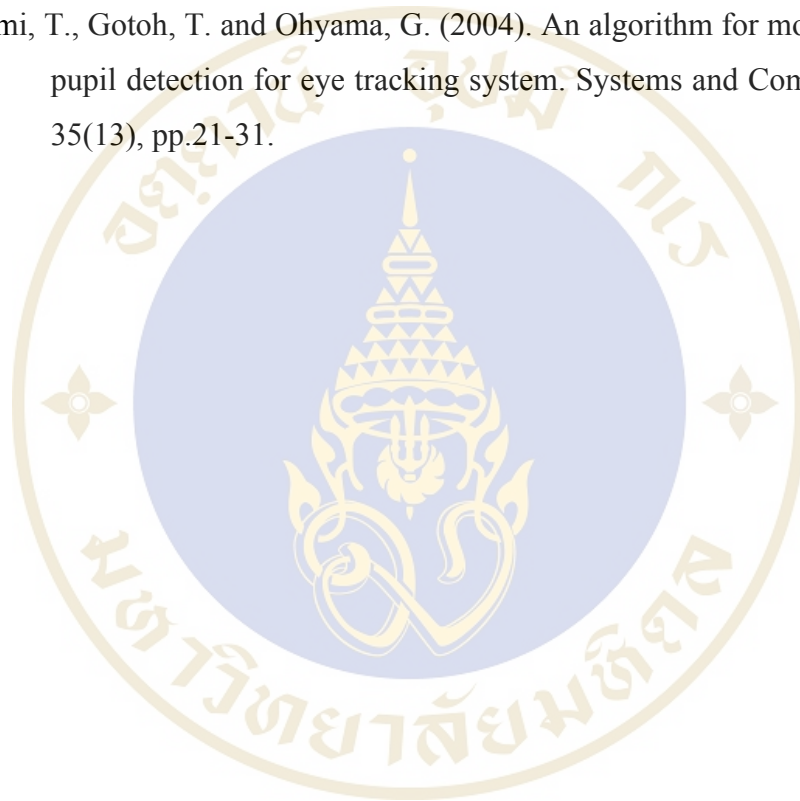
This study contains with some limitations of the methodology, the information in this study is collected via an online survey which the result of the survey might not provide the big picture, as it requires the respondent has the internet literacy. Additionally, the study aims to collect the data from the elderly age group, which might be affected by the demographic dimension. However, the limitation might not provide a big impact on the overall result of this survey as the majority of Thai have the ability to access the internet. Collecting data via an online survey can help to access a lot of respondent than a traditional survey. There are only 127 respondents. In a further study, there are opportunities to conduct more respondents in term of offline and online platforms. Moreover, to get more respondents leads to conduct more opinions and see the different expectations of elderly people in each group.



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Appendix A: Questionnaire

Part 1 : Screening Question

- 1) Have you ever use supplementary food?
 - a) Yes
 - b) No
- 2) Do you interest / have a plan to buy supplementary food?
 - a) Yes
 - b) No
- 3) How long have you been using supplementary food?
 - a) Less than a month
 - b) A month
 - c) A month to 6 months
 - d) 6 months to 12 months
 - e) More than 12 months

Part 2: Information on the factors that affect behavior of elderly people on selecting the supplementary food

	Strongly Disagree	Disagree	Agree	Strongly Agree
Using a supplementary food would enhance my health				
Using a supplementary food would stay healthy longer				
Using a supplementary food would reduce the risk for illness				
Using a supplementary food would look younger				

	Strongly Disagree	Disagree	Agree	Strongly Agree
Using a supplementary food would enjoy life more				
I worry that there are harmful chemicals in my food				
I read more health-related articles than I did 3 years ago				
I am interested in information about my health				
I am concerned about my drinking water quality				
I usually read the ingredients on food label				
Surrounding people have effect on my purchasing decision				
I would decide to purchase if my friend has already purchase				
I would find review before making purchase decision				
I would recommend products to someone who seeks my advice				
Humans have the right to modify the natural environment to suit their needs				
Reduce the use of artificial fertilizers in agriculture				
It is important to me that the products I use do not harm the environment				
I have an intention to buy a supplementary food within six months				

Part 3: Demographic Information

1. What is your gender?
 - a) Male
 - b) Female

2. What is your age range?
 - a) 60 - 69 years' old
 - b) 70 - 79 years' old
 - c) More over 80 years' old

3. What is your educational background?
 - a) High-School Diploma
 - b) Bachelor Degree
 - c) Master Degree or above

4. What is your personal Monthly Income?
 - a) Below 15,000 THB
 - b) 15,001 THB - 45,000 THB
 - c) 45,000 THB - 60,000 THB
 - d) 60,001 THB – 80,000 THB
 - e) More than 80,000 THB

