FACTORS INFLUENCING ON PURCHASE DECISION OF A DIETARY SUPPLEMENT PRODUCT FOR GENERATION X IN BANGKOK DURING COVID-19

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ABSTRACT

The objective of this paper is to identify the important factors that influence THE PURCHASE DECISION OF DIETARY SUPPLEMENT PRODUCT of Generation X who lives in Bangkok Thailand during the Covid-19 as well as to identify the most vital factors to final on the buying process of a dietary supplement product. The data were collected from 100 respondents who used to buy or currently consume the dietary supplement product which focuses on the top 3 diet supplement products trend in 2021. The scope of this study includes Immunity-Boosting supplements, Collagen supplements, and Vitamin & mineral supplements. This study employs a quantitative method to identify the factors on purchase decision of selection. The research findings show that the main factors that affect Generation X's decision on purchasing dietary supplements are Brand Image, Education and Health Consciousness. Moreover, the most important factor in the final decision is Brand Image. The findings could help the marketer and business owner to do the business plan to reach their target audience.

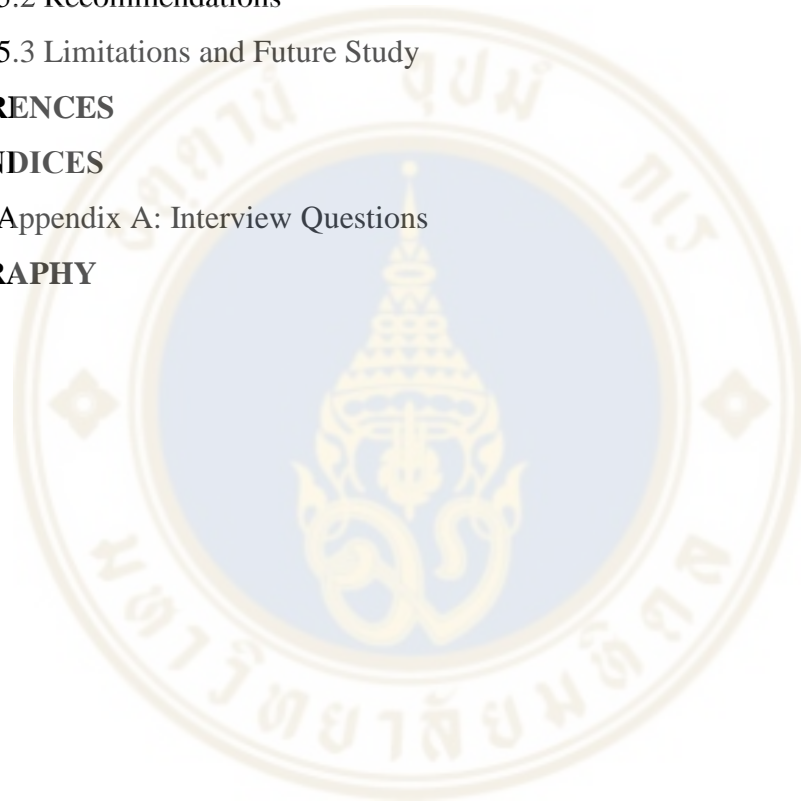KEY WORDS: Dietary supplement/ Generation X/ Purchase decision/ Bangkok

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CHAPTER I
INTRODUCTION

1.1 Background

Nowadays, we cannot deny that the COVID-19 pandemic changes many behaviors of customers across many different dimensions such as price-oriented, digital, eco-friendly, healthy, etc. The significant reasons are that it affects economies all over the world and during the lockdown event, in some countries, created a massive adaptation for living. The COVID-19 pandemic is one of the most significant health crises in modern history. People are more health-conscious than before, especially those who work at home. Those working at home expect to spend more in health-related categories, which is indicated by The PwC's Global Consumer Insights Pulse Survey June 2021.

Thailand, the first country in ASEAN, has become a full-fledged aged society. The fertility rate rapidly decreased from 6 births per woman in the 1970s to 1.5 births per woman in 2020(Figure1) and has a longer life expectancy of 77.7 years avg. both sexes combined. Thailand's aging dependency ratio is projected to increase from 18% in 2020 to 30% in 2030 which almost doubles within 10 years.
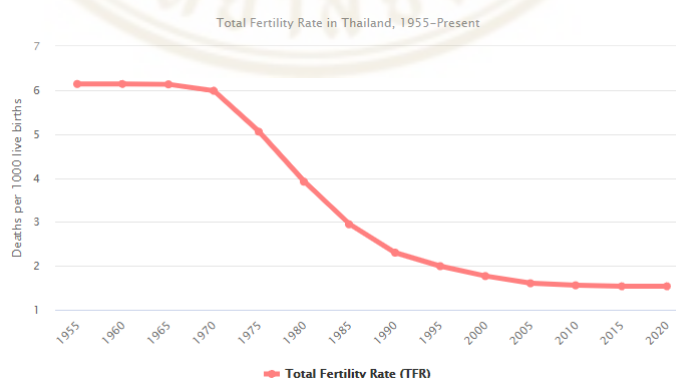
Figure 1.1: Total Fertility Rate, including,1955-Present

Source: United Nations, Department of Economic and Social Affairs, Population Division, Worldometers Website

The population share in Thailand, Generation X or people aged 44-54 years born between 1965-1980, is the second-highest share of the population, 25% of the total Thailand population. The TCDC trend2020 research indicated that generation X has the most powerful in its family. They make up a large portion of the purchasing power more than other generations as well. Linkage to the trend of an aging society in Thailand, generation X is going to become elderly. Therefore, preparation for getting older is essential for them.

As Generation X sits between Baby Boomers and Millennials, it is not difficult for these people to adopt many shopping channels from older and younger gen. Then, the shopping channel of Generation X after the pandemic was changed. Generation X shoppers turn to shop on digital platforms for groceries. "Overall, 27% of Generation X says their shifts to online shopping are likely to stick, so brands and retailers need to incorporate digital strategies when targeting the Generation X audience." Digital Media Solutions, Inc. (NYSE: DMS)

National substitute of health defined the scope of Dietary supplements, which contain vitamins, minerals, herbs or other botanicals, amino acids, enzymes, and many other ingredients. Dietary supplements come in a variety of forms, including tablets, capsules, gummies, and powders, as well as drinks and energy bars.

In 2020, the global dietary supplement market was valued at USD 140.3 billion and was expected to expand at a compound annual growth rate (CAGR) of 8.6% from 2021 to 2028 (Grand View Research, Feb2021). Gene Bruno, professor of Nutraceutical Science at Huntington University of Health Sciences, identified dietary supplement industry trends 2021, including Immunity-Boosting Supplements, Collagen Supplements, and Vitamin & mineral supplements. (2021). This paper will focus on these three types of dietary supplements. The immunity-boosting supplement means the product that encourages a person's immunity, such as Vitamin C, Vitamin D, Zinc, and herbals. According to collagen supplement brands in Thailand, there are many popular brands such as Colligi Collagen by Amado, Renatar plus collagen, etc. The benefit of collagen is to promote the production of protein, including elastin and fibrillin. Vitamin & mineral supplements brands include Blackmore, Vistra, Maga, DHC, etc. While vitamins dominate the category, the immunity-boosting supplement, herbal extracts are estimated to be the fastest-growing ingredients. (Gene Bruno, 2021)

Figure 1.2: Examples of Dietary Supplement Products

Thai adults commonly use dietary supplements. The healthy and supplement products in Thailand tend to grow after the Pandemic. Share of Thai consumers whose frequency of taking nutritional supplements increased after the outbreak of COVID-19 as of July 2020 of 59 percent of respondents. (8,599 respondents, Statista research). Plus, the diet supplement in Thailand has an average growth of 7 percent per year. (EIC,2017)

This study was intended to study the factors on the purchase decisions of Generation X of a dietary supplement product, which will be beneficial for understanding deeply to develop marketing strategies and guide the way to develop new dietary supplement products of those business owners for the Generation X target audience in Bangkok.

1.2 Research Question

The research addressed in this study was the following:

1. What are factors on purchase decision of a dietary supplement product in Thai Generation X in Bangkok during the Covid-19.?

1.3 Research objectives

1) To identify the factors that influence the purchase decision of Gen X's of a dietary supplement product in Bangkok during the Covid-19.

2) To identify the most critical factors that affect the final decision.

1.4 Scope of the Study

This study conducts a quantitative method of research in which an online-based survey. The scope of this study is to collect the information from 100 Generation X who lives in Bangkok and used to buy dietary supplement products during the Covid-19 pandemic.

1.5 The benefits of this study

The research aims to study the factors that have influenced Generation X's by using Health-conscious, Integrated Marketing Communication(IMC), Brand Image, and Personal socioeconomics to support its analysis in Bangkok and the central area in Thailand. After the factors are acknowledged, these will be extra benefits as below.

1. A marketer can develop appropriate marketing strategies to meet the purchase decision factors of Generation X's effectively during the COVID-19 and Post Covid-19.

2. The new entrepreneurs will understand Generation X's behavior and ability to develop business strategies or new production development consistent with the key decision-making factors.

CHAPTER II
LITERATURE REVIEW

2.1 Health-conscious during the COVID-19 pandemic

Health-conscious or health consciousness is behavior and attitude which considers health considerations in a person's diet or lifestyle. (Bogueva, D, Marinova, D. Raphaely, T (2018) Handbook of Research on Social marketing and its influence on the animal origin food product consumption, IGI Global, Hershey, PA)

PWC Thailand research indicated that rapidly changing behaviors in 2020 are accelerating consumer embrace of digital, health, and sustainability trends which 45% of global consumers say healthcare is one of the top three reasons for living in a city, and 69% of global consumers are more focused on mental health and well-being. The research from the Medical University of Lodz, Poland, found that if you are a health-savvy consumer or have a high health-conscious pre-pandemic period, their behavior about the dietary supplements and health-related behaviors, beliefs and other psychological constructs would be unchanged. Moreover, the findings of the Medical University of Lodz,2021 suggested that consumption of dietary supplements did not significantly change over the pandemic period, which is inconsistent with market analysis reports suggesting a rise in dietary supplement purchase and use in the same period.

2.2 Factors that influence a Purchase decision

2.2.1 Personal socio-economic factors

This part will study the personal socio-economic factors that are also important factor that affects the decision to select a dietary supplement. The reason is that the different socio-economic backgrounds impact the diet priorities and spending

amount on the supplement, which is indicated by the positive relationship of The number of dietary supplement unit consumers purchased online and the income & gender of Raevadee(2006). The socio-economic data of this paper include gender, educational level, and monthly net household earnings.

T Lallukka, M Laaksonen, O Rahkonen, E Roos, and E Lahelma(2006) have studied multiple socio-economic circumstances and healthy food habits. The study found that women aged 50–60 years reported healthy food habits more often than younger women. For men, a tendency for more healthy food habits was seen for the 60-year-olds, but it was not statistically significant. Childhood socioeconomic circumstances were not related to healthy food habits. However, those with higher - education, occupational class, or income were more likely to report healthy food habits. Furthermore, homeowners and those with no current economic difficulties had a higher prevalence of healthy food habits among both women and men.

Annette D. and Douglas M. found that higher education is associated with supplement consumption. The surveys of National Health and Nutrition Examination (NHANES) in 2003–2006, more than high school education, the supplements were used by 61% whereas only 37% of those were less than high school education. Moreover, educational level was positively associated with supplement use in many pieces of research. (Annette D. and Douglas M., 2014)

2.2.2 Factors based on Integrated Marketing Communication Strategy (IMC) (2018, as cited in Philip Kotler, 1997)

Many definitions of IMC were created by plenty of experts around the world. This study selects two updated definitions. The first definition is a comprehensive statement to exhibit the scope of IMC that is *"An approach to creating a unified and seamless experience for consumers to interact with the brand/enterprise; it attempts to meld all aspects of marketing communication such as advertising, sales promotion, public relations, direct marketing, and social media, through their respective mix of tactics, methods, channels, media, and activities, so that all work together as a unified force. It is a process designed to ensure that all messaging and communications strategies are consistent across all channels and are centred on the customer." (MMC learning)*

The second definition comes from the latest definition, which seems the most proper for twenty-century. *"IMC is the concept and process of strategically managing audience-focused, channel-centred, and result-driven brand communication programs over time." (Kliatchko, 2005)*

The definition above links to the benefits of IMC, which enables marketers to combine all of their communications in order to plan and create a coherent and synergistic approach. An essential advantage of IMC is that it appreciates the significance to marketing strategy and corporate branding of new communication tools, such as direct marketing, Internet marketing, or different types of sales promotions (McGrath, 2005b; Pickton and Hartley, 1998; Drobis, 1997/1998).

The relationship between marketing communication and purchase decision was identified by Raevadee (2006), 'the study of factors relating to purchase decisions of dietary supplement in Bangkok'. She mentioned that health claims on disease prevention that come along with functional foods also attract consumer attention and greatly influence the purchasing of functional foods. Another linked content came from Schiffman and Kanuk (2000), which stated that consumer behavior is defined as the behavior that consumers display in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy their needs.

This study plans to research factors that impact the purchase decision of Gen-X to brand communication programs related to the first two pillars of IMC of Kliatchko that are audience-focused and channel-centered.
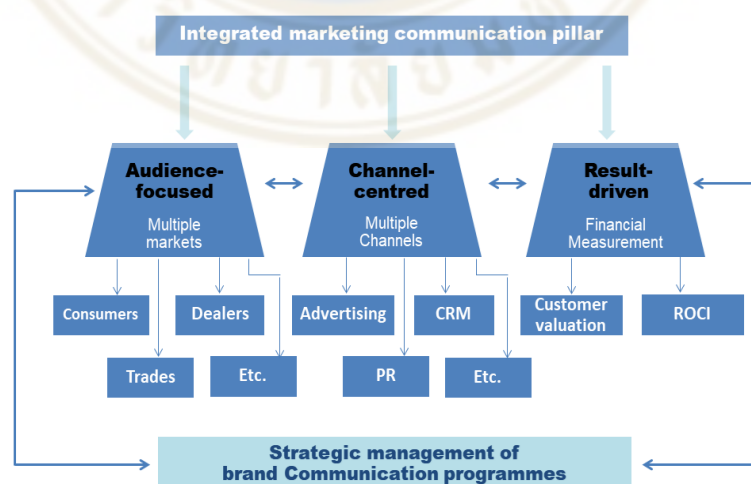
Figure 2.1: Three Pillar of IMC model

Source: International Journal advertising, 2005, 24(1)

The first Pillar is audience-focused that includes both external and internal audiences. This study intends to examine the significant factors of external audiences such as customers. The second effect of successful communication is appropriated channels to match the first pillar. Communication tools such as advertising, public relations, direct marketing, sales promotion, presenter, customer relationship management (CRM), or online marketing are channels that let brands reach and connect with target audiences. The last pillar is result-driven. The brand owner or the company must require the result of its investment means that the IMC program is measurable and accountable.

2.2.3 Brand Image

Keller (1998) defined brand image as a consumer's perception when they see a brand and reflected by brand associations in their mind. And these brand image associations are multidimensional and contain the emotional dimension or the attitudes regarding the brand and the perceived quality dimension. Lailatul Faizah Abu Hassan indicates that from consumers' overall picture of their experiences, brand image is crucial because, through this method, brand image will create the consumer's cognitive, emotional, and behavioral responses as a result.

Park, Jaworski, and Maclnnis (1986) stated that brand image is one strategic technique with the goal of helping the concept of a brand to be completed by means of an exercise in brand management. Titayapa (2020) argued that in the current competitive market, brand image is one of the important factors that can help to boost any business' performance.

The Brand Image is a tool that can change people's buying behaviors which contain purchase decisions in the process; it is also used to shape the advertisement or communication in distribution channels to drive a positive message to customers and help products to stick in their minds. (Muhammad Ehson Malik et al, 2013)

2.3 Purchase Decision

According to the consumer buying process of Kotler (2021), the five stages of the purchasing decision process are a famous framework to use and simply understand.

The first stage is problem recognition which the buying process begins when the buyer recognizes problems or needs. Needs that are motivated from within or external stimulator, seller must specify situations that stimulate certain needs by compiling information from consumers. Sellers can identify stimuli that tend to generate interest in categories that can stimulate consumer interest.

Information search is the second stage after which consumers are aware of their needs. Consumers will encourage searching for information. Attention reinforcement is a definition that is used for calling the way of searching information. At this stage, consumers will find more product and services knowledge by reading materials, traveling through online channels, asking their friends, or visiting the real store to see specific products and services.

Evaluation of alternatives is the third step. Consciousness and logical thinking apply in this stage to judge the products or services. Consumers try to meet the demand by seeing each product as a set of features that provide different benefits to meet the needs. They will give the most attention to the features that are useful for them.

Consumers create a stimulus to buy the most favorite brand in this step called a Purchase decision which has two factors influencing the decision making of the consumers. The first factor is other people's attitude while the second is the unexpected situation. The unexpected situation occurs and changes in buying incentives such as expected prices and advantages.

Lastly, post-purchase behavior will occur after the purchasing process in which consumers will receive a certain level of satisfaction or dissatisfaction. That feeling will influence consumer behavior later. If consumers are satisfied, they will show a higher possibility to come back and buy the product or service again.
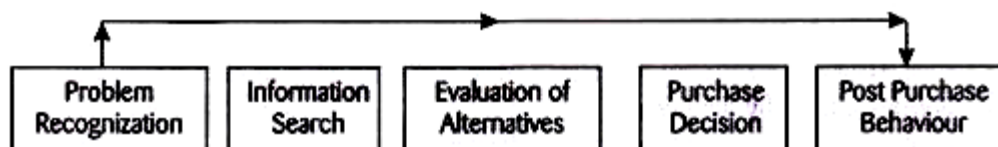
Figure 2.2: Consumer buying process of Kotler (2021)

Source: Development of Consumer Behavior Model for "Green Product Marketing". (Jain, 2013, p.37)

2.4 The conceptual framework

According to the literature review, to understand factors influencing on purchasing decisions of Generation X consumers in Bangkok, the researcher formed the conceptual framework which factors are personal socio-economic factors, Health consciousness, IMC, and Brand Image. These may have a positive and significant effect on purchasing decisions.
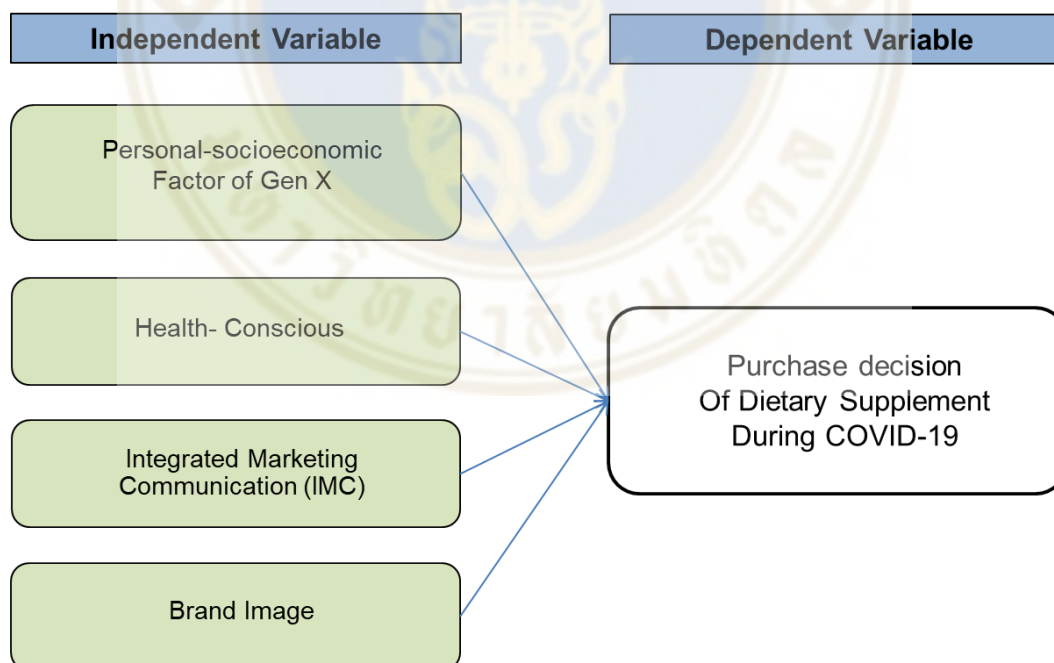
Figure 2.3: Conceptual Framework for factors influencing on purchase decision of a dietary supplement for generation X in Bangkok during COVID-19

CHAPTER III
RESEARCH METHODOLOGY

This chapter describes the overall scope of the methodology used for this thematic paper and focuses on quantitative research as a means to show the findings. The objective of this research is to identify the factors that influence the purchase decision of Generation X of a dietary supplement product in Bangkok during the Covid-19 and to find the most important factors that affect the final decision. The section starts with the sampling design, followed by data analysis.

3.1 Research Design

The Covid-19 pandemic occurred in Thailand for the fourth phase leading to adapted Thai customer behavior. This study aims to research the factor influencing purchase decisions during the pandemic. Many factors are listed which start from screen questions, followed by questions of factors that influence purchase decision which includes personal-socioeconomic, integrated marketing communication(IMC), and brand image.

3.2 Data Collection Methodology

This research employed a convenience sampling method by an online survey of 100 respondents of generation X due to time constraints and convenient accessibility to the researcher. Nonetheless, the purposive sampling method was also used to obtain respondents that passed the criteria, e.g. the respondents who have ever bought at least one time of dietary supplement during the Covid-19 outbreak.

3.3 Instruments

Quantitative research: The study will collect online surveys with at least 100 respondents. The questionnaire will be in Thai and English. The questionnaire contains six parts, as follows:

Part 1: Screen questions; The questions will select only the target group who are Gen X, living in Bangkok, and experienced buying dietary supplement products during the Covid-19 pandemic.

Part 2: Socio-economic questions; Demographic information includes gender, career, education level, number of habitats in a place of residence, and net monthly household income.

Part 3: Health Consciousness; The healthy behaviors that dietary supplement users have been done by investigating with specific questions of consumer behavior.

Part 4: Integrated Marketing Communication (IMC); Specific questions of IMC includes Advertisement, Sales promotion, and Event/Activities.

Part 5: Brand Image; The perceived brand image from consumer perspective through multi-dimension of questions.

Part 6: Purchase decision; The final part of the questionnaire asks according to the five stages of the purchasing decision process.

3.4 Data Analysis

These analysis methods used a descriptive method, T-test, ANOVA, and multiple linear regression (MLR) for quantitative analysis. After collecting the survey from the sampling via Google Form, data will be analyzed through the Statistical Package for Social Sciences (SPSS) Program to generate inferential statistics and provide basic descriptive statistics.

First, this study summarizes the demographic data and behavior of the respondents by using the Frequencies analysis. The next chapter is findings in which will summarize the collected data. To determine the relationship between independent variables and dependent variables, this study uses T-test, ANOVA, multiple linear

regression (MLR) statistics to analyze the data. The result of the analysis will show in tables, and figures in order to answer the research question.

CHAPTER IV
RESEARCH FINDINGS

This chapter conducts for manifesting the results of analysis and findings of the factors that influence the purchase decision of a dietary supplement product for Generation X in Bangkok during Covid-19 as well as indicating the most important factors that affect the final decision of buying a dietary supplement which is both the research objectives. The findings will be revealed by using four statistical methods which are descriptive analysis, T-Test, ANOVA, and a multiple linear regression procedure with graphs and tables. The 100 respondents were sorted by three screen questions which included people in Generation X, living in Bangkok, and used to buy a dietary supplement during Covid-19.

4.1 The respondents' profiles

According to the online survey, the results of 100 respondents are all valid, which are Generation X people aged 44-54 years. (TCDC research, 2020) One hundred respondents are mostly Females, who are 74 people (74%). The main occupations include employee and entrepreneur that are 59 (59%) and 25 (25%) respondents, respectively. Educationally, master degree and above pluses bachelor degree are over 96 respondents (96%) who are highly significant figures. Another respondents' assessment is family income which is 35% of respondents have more than 100,000 THB and have a reduction proportion respectively. These respondents' demographic profiles are summarized in Figures 4.1- 4.4.

Gender

Figure 4.1: The Gender of Total Respondents (n=100)

Occupation

Figure 4.2: The Occupation of Total Respondents (n=100)

Education

Figure 4.3: The Education of Total Respondents (n=100)

FamilyIncome

Figure 4.4: The Family Income of Total Respondents (n=100)
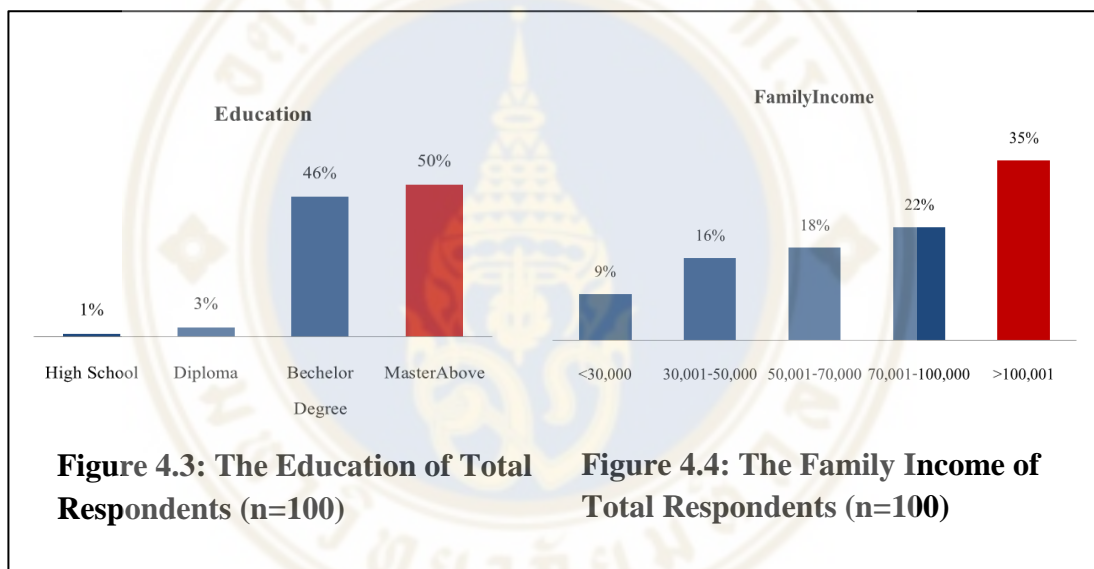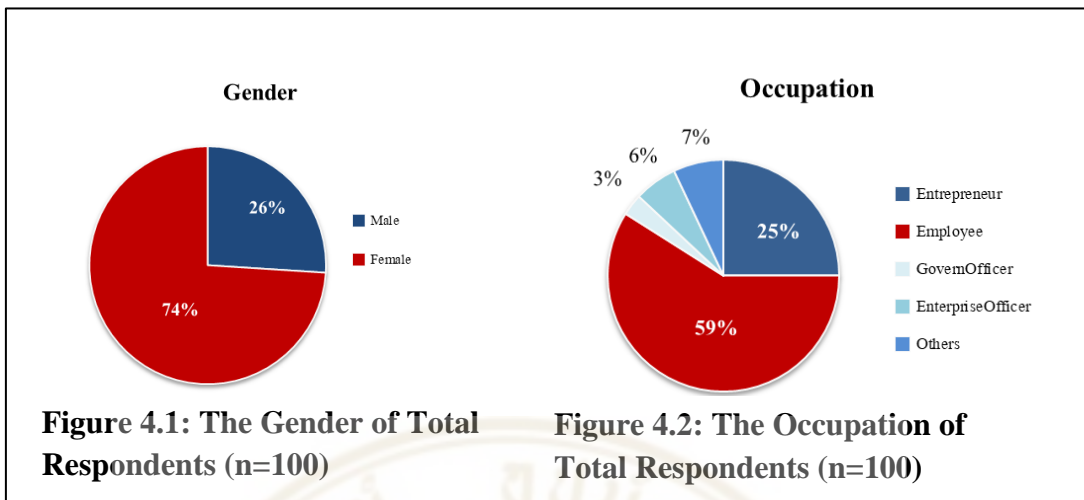
4.2 Findings

4.2.1 Descriptive Statistics: Health consciousness

Table 4.1: The descriptive statistics of Health Consciousness which is the independent variable factors for the Total Respondents (n=100)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
HealthConscious	100	2.00	5.00	3.7620	.69729
Valid N (listwise)	100				

According to Table 4.1 above, health consciousness, the variable's mean is 3.76 and SD is 0.69, indicating that Health consciousness is critical to Generation X for the purchase decision method of dietary supplements.

4.2.2 Descriptive Statistics: Personal Socio-economic factors

The personal socio-economic factors include gender, educational level, occupation, and family monthly income. According to the findings, this paper will focus on personal socio-economic factors that show the significant data only.

4.2.2.1 Gender

Table 4.2: The analysis of mean of gender comparison between men and women respondents which is the independent variable factors for the Total Respondents (n=100)

Gender	MEAN			
	Health Conscious	IMC	Brand Image	Purchase Decision
Men(26)	3.58	3.08	3.43	4.01
Women(74)	3.82	3.31	3.69	4.08

According to Table 4.2, Firstly, the different gender indicated the different levels of the other independent variable factors which explicitly see that women are interested of health-conscious (Mean 3.82), IMC (Mean:3.31), Brand Image (Mean:3.69) and Purchase Decision (Mean:4.08) which are higher than men in every related factor that are health conscious(Mean 3.58), IMC (Mean:3.08), Brand Image (Mean:3.43) and Purchase Decision (Mean:4.01).

4.2.2.2 Education and Monthly Net Household-Income

Table 4.3: The descriptive statistics of Socio-economic factors which is the independent variable factors for the Total Respondents (n=100)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Gender	100	1.00	2.00	1.7400	.44084
Education	100	1.00	4.00	3.4500	.60927
Occupation	100	1.00	5.00	2.1800	1.27430
FamilyIncome	100	1.00	5.00	3.5800	1.34975
Valid N (listwise)	100				

According to Table 4.3, the result of education in descriptive statistics shows that Generation X who graduated at least bachelor degree with the variable mean is 3.45 and SD is 0.60 is important to purchase decision of Generation X which is the same as the monthly household-income factor which the variable mean is 3.58 and SD is 1.34.

4.2.3 Descriptive Statistics: Integrated Marketing Communication (IMC)

Table 4.4: The descriptive statistics of Integrated Marketing Communication (IMC) which is the independent variable factors for the Total Respondents (n=100)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
IMC_Ad	100	1.60	4.60	3.3480	.61668
IMC_Promotion	100	1.00	5.00	3.3025	1.07090
IMC_Event	100	1.00	5.00	3.0100	.86645
IMC_Total	100	1.33	4.42	3.2483	.65873
Valid N (listwise)	100				

According to Table 4.4, the respondents indicated an important degree of each part of IMC which see that the overall score is not high, meaning that IMC is not the factor that significantly affects the purchase decision of Generation X during the

Covid-19 Situation. However, the findings indicated that advertising (Mean=3.34, SD=0.61) and promotion (Mean=3.30, SD=1.07) are more important factors than events (Mean=3.01, SD=0.8).

Table 4.5: The descriptive statistics of advertisement which is the independent variable factors under Integrated Marketing Communication (IMC) for the Total Respondents (n=100)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
IMC_Ad1	100	1.00	5.00	3.7900	1.12182
IMC_Ad2	100	1.00	5.00	3.4400	1.24981
IMC_Ad3	100	1.00	5.00	4.0100	.99995
IMC_Ad4	100	1.00	5.00	3.0900	.91115
IMC_Ad5	100	1.00	5.00	2.4100	1.13791
Valid N (listwise)	100				

According to Table 4.5, IMC questions, this paper intended to conduct the survey to cover many factors under each topic of IMC. Analysis deeper into the advertising questions, the finding showed that question no.5 (Mean=2.41, SD=1.13) was off the beaten path which is under the average. Question no.5 is I will buy a DS by presenter endorsement or KOL which indicates that the presenter is not important to the purchase decision of generation X during Covid-19. Contrastingly, question3 (Mean=4.01, SD=0.99) is that I see advertising of the DS brand via Facebook or Youtube which identifies channels that Generation X consumed during Covid-19.

4.2.4 Descriptive Statistics: Brand Image

Table 4.6: The descriptive statistics of Brand Image which is the independent variable factors for the Total Respondents (n=100)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
BrandImage	100	1.00	5.00	3.6240	.76133
Valid N (listwise)	100				

According to Table 4.6, brand image, the mean is 3.62 and SD is 0.76, indicating that brand image is important to Generation X for purchase decisions of dietary supplements.

4.2.5 T-Test: Gender

Table 4.7: The independent samples T-test of Gender which is the independent variable factor for the Total Respondents (n=100)

Independent Samples Test

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | | |
		F	Sig.	t	df	Significance One-Sided p	Significance Two-Sided p	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	95% Confidence Interval of the Difference Upper
PurchaseDecision	Equal variances assumed	7.082	.009	-.478	98	.317	.634	-.06623	.13865	-.34139	.20893
	Equal variances not assumed			-.378	31.553	.354	.708	-.06623	.17500	-.42289	.29043

According to Table 4.7, this study used Independent Sample T-test to see whether different gender will affect the purchase decision of dietary supplements. The result showed that Sig. (2-tailed) is 0.634 which means both women and men do not influence the purchase decision in the same direction.

4.2.6 ANOVA: Education, Occupation and Monthly family income
4.2.6.1 Education

Table 4.8: The Anova analysis of Education to purchase decision.

ANOVA

PurchaseDecision

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.363	3	1.121	3.264	.025
Within Groups	32.971	96	.343		
Total	36.334	99			

According to Table 4.8, Education's variable (Sig. = 0.025) is significant which means that education is a factor influencing the purchase decision of dietary supplement product of Generation X in Bangkok.

4.2.6.2 Occupation

Table 4.9: The Anova analysis of Occupation to purchase decision.

ANOVA

PurchaseDecision

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.628	4	.157	.418	.795
Within Groups	35.706	95	.376		
Total	36.334	99			

According to Table 4.9, the Sig. is higher than 0.05, meaning that Occupation (Sig. = 0.795) is not a factor influencing the purchase decision of dietary supplements.

4.2.6.3 Family Monthly Income

Table 4.10: The Anova analysis of Family Monthly Income to purchase decision

ANOVA

PurchaseDecision

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.922	4	.480	1.326	.266
Within Groups	34.412	95	.362		
Total	36.334	99			

According to Table 4.10, the Sig. is higher than 0.05, meaning that Family Monthly Income is not a factor that influences the purchase decision of dietary supplements.

4.2.7 Multiple Linear Regression (MLR)

Table 4.11: The analysis of Multiple Linear Regression (MLR) of the independent variable factors for the Total Respondents (n=100)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.124	.344		6.181	<.001
	HealthConscious	.219	.079	.252	2.772	.007
	IMC_Total	-.065	.094	-.071	-.693	.490
	BrandImage	.366	.086	.460	4.270	<.001

a. Dependent Variable: PurchaseDecision

According to Table 4.11, Multiple Linear Regression analysis, this study used the independent variables which include Health Consciousness, Integrated Marketing Communication (IMC), and Brand Image explored what factors influence a purchase decision. Finally, there are two (2) variables that affect the purchase decision of dietary supplement of generation X which are Brand Image, and Health Consciousness variables arranged in descending standardized coefficients of beta; the Brand Image variable, with a coefficient equal to 0.399, the Health Consciousness variable, with a coefficient of 0.25.

To answer research objective no. 1, assembling the data and analysis, the study found that there are many factors related to influencing purchase decisions which are one factor from personal socio-economic which is education, health consciousness, and brand image.

According to the personal socio-economic variable, education is the only variable that influences the purchase decision of dietary supplements. This result indicated that Generation X who has a high education which is a bachelor's degree and upper knew and awarded the advantage of consuming a dietary supplement. The outcome of the study is not relevant to the previous research which shows that the different socio-economic backgrounds impact the diet priorities and spending amount on the supplement which is indicated by the positive relationship of the number of dietary supplement units consumers purchased online and income & gender of Raevadee(2006). However, the result in this study relates to Annette D. and Douglas M.'s research which indicated that educational level was positively associated with supplement use in many pieces of research.

In terms of Brand Image, it has a high-level influence compared to the other two factors. The reason is if the customer believes that this dietary supplement has a good brand image, it will reflect the perceived good quality of product as well because the brand image contains the emotional dimension and attitudes regarding the brand and the perceived quality dimension (Kotler,1998). The additional information which also supports this study is Brand Image contains purchase decisions in the process for the reason that it shapes the communication as well. (Muhammad Ehson Malik et al, 2013)

For the health consciousness factor, the respondents who have more concern about their health tend to make a purchase decision of dietary supplements more than the person who lives a life with no health consideration. This study is consistent with prior research that shows the consumption of dietary supplements of those who are health-savvy did not significantly change over the pandemic period in which they consume a dietary supplement with or without the pandemic. (Medical University of Lodz, 2021)

For the second research objective, the key findings of the most important factors that affect the final decision when Gen X was influenced on the purchase decision of dietary supplements in Bangkok is Brand Image. The Bangkokian who is Generation X gave a priority to the Brand Image of dietary supplement products. They feel more trust in a product that has a good brand image and concern about other people around them.
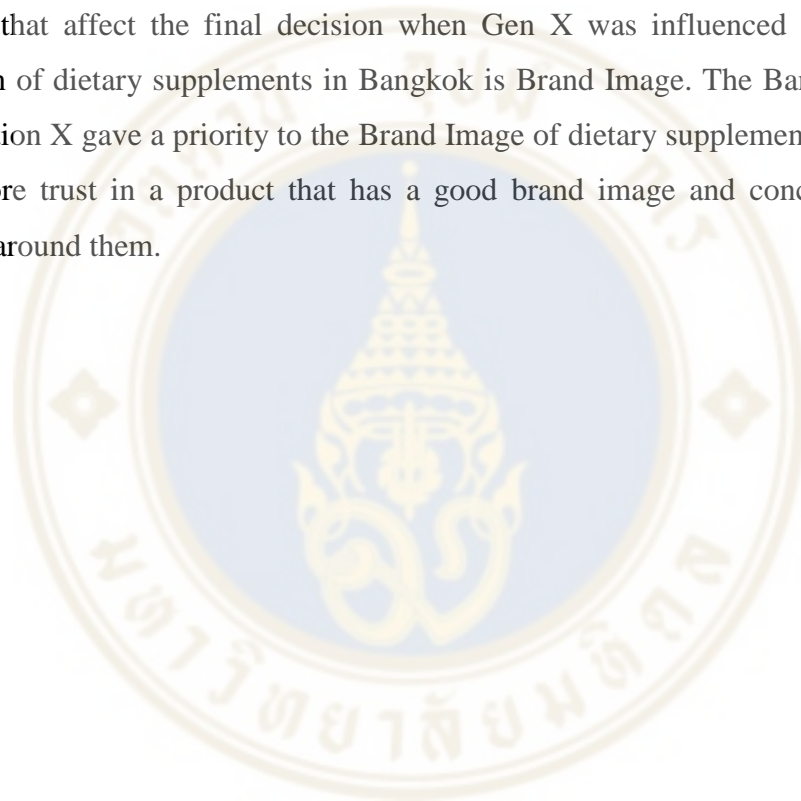
CHAPTER V
CONCLUSIONS

This research aims to determine the factors that influence the purchase decision and to identify the most important factor that influences the consumer purchase decision dietary supplement of Generation X in Bangkok during Covid-19. The study used is the Conceptual framework that came from the hypothesis of the researcher which includes 4 independent variables that are Health consciousness, Personal-Socioeconomic factor, Integrated Marketing Communication (IMC), and Brand Image. These conclusions have been formed based on the data collection by the quantitative method. The results were analyzed into the recommendations part and for future research as well.

5.1 Conclusions

According to the research, the researcher found many factors that influence the purchase decision of Generation X in Bangkok during Covid-19. The main factors are brand image, education, and health consciousness.

The brand image of the product is a factor that highest impacts the purchase decision of dietary supplements of Generation X in Bangkok during Covid-19 because a good brand image means the reliable product which Generation X are concerned about. People who are going to be elderly and Generation X who can afford reliable products take this brand image factor into account readily. Moreover, people ages 44-54 years (TCDC research, 2020) are practical in information searching via online platforms and evaluating alternatives. Hence, the brand image is the first thing that Generation X will take into consideration.

Health consciousness is the second important factor influencing the purchase decision of a dietary supplement. Generation X who cares about their health

will look for good food and also dietary supplements to repair and reinforce some deterioration in the body especially in the Covid-19 pandemic.

Lastly, education is only one personal socio-economic factor that is related to the purchase decision. The reason is that the higher education people get, the higher information they will consume. For selecting the dietary supplement, which is the nutrition that they get into their mouth, Generation X will think and make an effort to choose the best one for them.

5.2 Recommendations

5.2.1 Recommendations for Marketer

1. Develop a good brand image by educating in terms of the benefits of the product and product's knowledge constantly to encourage the usefulness. Furthermore, brand communication can shape the product image by creating advertising in functional perspectives with no presenter via effective channels for Generation X which are Facebook and Youtube.

2. To access the target customers directly, marketers should target the health-conscious and high education people as a major target group.

5.2.2 Recommendations for Business owner

For developing the new dietary supplement product, the business owner should consider the certifications and awards such as FDA (Food and Drug Administration), NSF(National Science Foundation), No.1 Brand Thailand from Marketeer company, The most admired brand from Brand Age, or Superbrand Award as a priority due to the product reliability of Gen-X who live in Bangkok that will reflect the product brand image. In addition to certificates and awards, the business owner should put the certificate logo on the packaging which is an important area as an own media space to communicate the standard of the product.

5.3 Limitations and Suggestions for Future Research

With regard to the time constraint, this research used only the quantitative method including the quantitative questions which could not cover every aspect of the relationship of the variables. Moreover, this study has no qualitative approach due to the Covid-19 pandemic that caused a lockdown in Bangkok, Thailand which might cause difficulty to conduct the interview. In another prospect, the target of respondents is Generation X who ages 44-56 while the researcher is a late Generation Y person. Hence, it was quite difficult to get the respondents directly.

For future research, the scope of this study is limited only to the Bangkok area. It might be useful if further research will be conducted in different areas in Thailand to see whether there is differentiation by area or not. Additionally, future research can conduct the same research with Generation X or Generation Z which face different situations in their lives that could impact their deciding factors and attitudes in very different ways. The product dimension or 4P of marketing might be a proper topic to consider the factor influencing the purchase decision because it relates to brand image directly.

REFERENCES

Annette D., Douglas M.(2014) Health habits and other characteristics of dietary
    supplement users.

Bill G. (2020) Dietary Supplement 2020: A Global Perspective, Retrieved by Oct 12,
    2020. https://www.newhope.com/market-data-and-analysis/dietary-
    supplements-2020-global-perspective

Carla K. Miller, Ph.D.; Teri R., MS, RD; Grace K., Ph.D. (2003)Decision-making
    patterns for dietary supplement purchases among women aged 25 to 45
    years,p1-2.

Diana B., Dora M., Talia R. (2018)Handbook of Research on Social Marketing and Its
    Influence on Animal Origin Food Product Consumption.

Erin Willis, Marla Royne Stafford (2016) Health consciousness or familiarity with
    supplement advertising: What drives attitudes toward dietary
    supplements?
    https://www.emerald.com/insight/content/doi/10.1108/IJPHM-06-
    2015-0026/full/html?fullSc=1&fullSc=1&mbSc=1&fullSc=1&fullSc=1

Gene B. (2021) Dietary Supplement Industry Trends 2021, Retrieved by July-22,2021
    https://www.nutrasciencelabs.com/blog/dietary-supplement-market-
    trends-2021

Katey D. (2021) The Top 7 Vitamin and Supplement Trends of 2021
    https://www.healthline.com/nutrition/vitamin-supplement-trends
    https://journals.plos.org/plosone/article?id=10.1371/journal.pone.02183
    98

Narithtorn T, EIC-SCB (2017) Three key strategies to survive the foreseeable
    challenges in the dietary supplements business, p1-2.

Worlddometer (2020) Population of Thailand. Retrieved by October 2021, from
    https://www.worldometers.info/demographics/thailand-demographics/

REFERENCES (cont.)

PWC's June (2021) The global consumer insight pulse Survey *The global consumer:*
        Changed for good consumer trends accelerated by the COVID-19
        pandemic are sticking, p3-9.

Michał Seweryn K., Ewelina P., Maja N., Zuzanna N., Radosław P., Edward K.,
        Tadeusz P.(2019) Knowledge about dietary supplements and trust in
        advertising them: Development and validation of the questionnaires and
        preliminary results of the association between the constructs, Retrieved
        by June 24, 2019.

Michał Seweryn K., Maria Dobielska, Ewelina Paul, Radosław P., Kowalczyk,
        Edward K. (2021) Health-, medication- and dietary supplement-related
        behaviors and beliefs relatively unchanged during the COVID-19
        pandemic lockdown, Research in Social and Administrative Pharmacy
        17 (2021) 1501–1506.

MMCLearning Integrated Marketing Communications
        https://multimediamarketing.com/integrated-marketincommunications/

Pawonpol S., Suttanipa S., Jantima K., Piriya P. (2019) An Exploratory of Marketing
        Communication Strategy of Dietary Supplement Products on Social
        Media in Thailand: Preliminary findings,p156

Philip J. Kitchen, Inga B.(2010) Integrated Marketing Communication(IMC),p3

Phimphat S.(2020) How are green marketing strategies affect the decision-making
        process of generation Y consumers in Bangkok Thailand.

Raevadee T. (2006) Factors relating to purchase decision of online dietary supplement
        in Bangkok, p50-55.

Schiffman, G. and Kanuk, L. (2000) Consumer Behavior.

S Jaideep. Top 5 Stages of Consumer Buying Process
        https://www.yourarticlelibrary.com/consumers/top-5-stages-of
        consumer-buying-process/48596

REFERENCES (cont.)

T Lallukka1, M Laaksonen1, O Rahkonen1, E Roos1,2 and E Lahelma1(2007)
Multiple socio-economic circumstances and healthy food habits, p8-9.

Titayapa A.,(2020) Factors influencing the selection of an international curriculum
school at the kindergarten level for generation Y in Bangkok.

Wiwat W., Doungporn A., Kriangsak M.(2013) Factors influencing dietary
supplement consumption: A case study in Chiang Mai, Thailand.p1-9.

Zhang, Y. (2015) The Impact of Brand Image on Consumer Behavior: A Literature
Review. *Journal of Business and Management*.

APPENDICES

Appendix A: Interview Questions

Interview Questionnaire

FACTORS INFLUENCING ON PURCHASE DECISION OF A DIETARY SUPPLEMENT FOR GENERATION X IN BANGKOK DURING COVID-19

_____

1. Screen questions:

1.1 Did you buy DS during the COVID-19?

1.2 Do you live in Bangkok?

1.3 You are 44-54 years old?

2. Socio-economic questions

    Gender Male/Female

    Occupation   ☐ Government officer

                   ☐ Employee

                   ☐ Entrepreneur

                   ☐ National Enterprise Officer

                   ☐ Others: _____

    Education   ☐ High School

                   ☐ Diploma

                   ☐ Bachelor degree

                   ☐ Master degree or higher

    Family Monthly ☐ Below THB 30,000

    Income   ☐ THB 30,001 – THB 50,000

                   ☐ THB 50,001 – THB 70,000

                   ☐ THB 70,001 – THB 99,999

                   ☐ THB 100,000 and above

Direction: Please check (✔) based on what extent you agree to the following statements using the following scales: **5 -** Strongly agree **4 –** Agree **3 –** Neutral **2 –** Disagree **1 -** Strongly disagree

Subject	Scales				
Part 3 Health Consciousness					
1	I worry that there is a useless nutrient in my food	5	4	3	2	1
2	I usually read the ingredient before making a purchase of dietary.	5	4	3	2	1
3	I am interested in health information	5	4	3	2	1
4	I am concerned about my health all the time	5	4	3	2	1
5	I always think that I did not eat enough nutrients in daily life.	5	4	3	2	1
Part 4 Integrated Marketing Communication (IMC)					
4.1 Advertising					
1	I see a lot of DS's advertising during covid-19	5	4	3	2	1
2	I bought DS by presenter endorsement/KOL	5	4	3	2	1
3	I see advertising of DS brand thru TV	5	4	3	2	1
4	I see advertising of DS brand thru FB /Youtube	5	4	3	2	1
5	I see advertising of DS brand thru OOH	5	4	3	2	1
4.2 Sales Promotion					
1.	I am interested in DS from sale promotion only	5	4	3	2	1
2	I am interested in DS from Discount coupon	5	4	3	2	1
3	I am interested in DS from Free Premium	5	4	3	2	1
4	I prefer to buy if a certain DS has a reward campaign	5	4	3	2	1
4.3 Event/Activity					
1	I tend to buy DS in hospital/clinic event	5	4	3	2	1
2	I tend to buy DS that launch with big event	5	4	3	2	1
3	I tend to buy DS if seller promote benefits to me	5	4	3	2	1
Part 5 Brand Image					
1	I will be positive with the brand if it is used by friends. Although I have never used that brand before.	5	4	3	2	1
2	I will buy DS if the brand is well-known.	5	4	3	2	1
3	I prefer to buy or use products from the brand I feels like belonging to its community.	5	4	3	2	1
4	I am willing to pay the price for products from a good brand reputation more than the price to pay for similar products from an unknown brand.	5	4	3	2	1
5	I will buy DS that the manufacturer accredited of receive reward from the famous institution e.g. FDA , Brand age, Marketeer	5	4	3	2	1
Part 6 Purchase decision					
1	Price is the most significant factor of DS	5	4	3	2	1
2	I will compare at least 3 brand DS before making decision	5	4	3	2	1
3	I will choose DS from the most famous brand	5	4	3	2	1
4	I will buy DS from personal's requirement e.g. remedy illness, protect sickness	5	4	3	2	1
5	I will buy DS from personal's requirement e.g. protect COVID-19 virus	5	4	3	2	1
6	I will buy DS if I consult from expertise only e.g. doctor, pharmacist, nutritionist	5	4	3	2	1
7	I will buy DS product that certified from the well-known Institution only e.g. MahidolU., FDA.	5	4	3	2	1