Master's Thesis

The Role of External Influence and Individual Self-determination for the Consumption of Dietary Supplements

By

Aye Muya Min

52116614

May 2018

Master's Thesis

Presented to

Ritsumeikan Asia Pacific University

In Partial Fulfillment of the Requirements for the Degree of

Master of Business and Administration

Table of Contents

Certification Page	2
Acknowledgments	
Abstract	4
1. Introduction	5
Research Questions	.11
Research Purpose	. 12
2. Literature Review	
2.1 Attitude towards information sources & Credibility	.14
2.2 Dietary Supplement Consumption & Source of Influences	.17
3. Conceptualization	.21
3.1Theoretical Framework & Hypotheses	21
3.2Conceptual Framework	.25
4. Research Methodology	.27
4.1 Conducting Survey	
4.2 Measurement	.27
4.2.1 Measurement for three different information sources	29
4.2.2 Research Independent & Dependent Variables	36
4.3 Sampling	
4.4 Data Collection Process	
5. Findings	.36
5.1 Awareness & knowledge about healthy lifestyle	36
5.2 Dietary supplement consumption pattern	
5.3 Motivation factors of dietary supplement consumption	38
5.4 Sources of Information	
5.5 Psychological satisfaction	42
5.6 Category of Dietary supplement consumption	43
5.7 Perception of generic medicines	
5.8 Attitude towards dietary supplements	45
5.9 Purchase intention of advertised product	.46
5.10 Relationship between the source of influence & motivation	48
5.11 Relationship between source of influence & age group	50
5.12 Information source & types of dietary supplements	. 51
Hypotheses Testing	
6. Discussion	.61
7. Conclusion	.65
Limitation and Further Research	.67
References	.69
Appendix	.74

Certification of Originality

I, Aye Muya Min, hereby declare that the following research is my own work and has never been submitted in any form at any other university or college. All the included information in the research either published or unpublished work of other scholars have been properly cited or acknowledged.

May 2018

Aye Muya Min

52116614

2018/05/30

Acknowledgments

First of all, I would like to express my heartfelt gratitude to my supervisor Professor BEISE-ZEE, Marian who never fails to guide me patiently and professionally for my preparation of this master thesis since inception. Without his guidance and kind support, this whole process will never happen. His knowledge, experience and guidance has given me the inspiration for the accomplishment of this thesis.

Secondly, I would like to thank my best friends in APU; Kezia and Kevin who always stand with me through every ups and downs and for sharing their ideas, showering their support to me in the process of research writing. And my one and only Somalian friend in APU, Mohamed for his great support for running SPSS and analyzing my data during the research process.

Thirdly, this research thesis and my master program will never be accomplished without the support of JDS (Japanese Grant Aid for Human Resource Development) which offered me the big opportunity for pursuing the Master Degree in Japan.

Last but not the least, I am very grateful to my mother, my husband and my family for their unconditional love and affection. And all the friends in APU specially MBA (Fall, 2016) with whom we have shared all good and unforgettable memories and colleagues in my previous job who let me bloom during past two years.

Abstract

The questions about how people change their mind, who change their decision and why they change have been raised for centuries. A number of analytical and theoretical studies have been done by the researchers about in which conditions people can be influenced to accept new ideas and messages. Previous researches have been done about the attitude change and social influence through both scientific analysis and the investigation of psychological process. More importantly, sources of information have been considered one of the most powerful social influences on the process of consumer's attitude change and purchase decision process.

Consequently, prior researches supported by social adaptation theory showed that attitudes and purchase intentions change according to the sources of influences and attractiveness particularly if consumers have little or no knowledge about the product. Taking dietary supplements as an example, the purpose of this master thesis is to examine which sources of information among professional healthcare providers, Word of Mouth and Media be the most effective mean for attitude change and decision-making process of consumers. Reflecting the theory of reasoned action (TRA) and Self-determination theory, this research also aims to conduct the impacts of individual self-determination in comparison with outside influence on consumer attitude and purchase intention of dietary supplements.

This research employs the quantitative approach using surveys both for users and non-users of dietary supplements. The main hypotheses basically focus on the relationship between the sources of influences and consumers' attitude and the purchase intention, using individual self-determination as a moderating factor.

The research findings discovered that sources of influences have positive effects on people's attitude and the implications further approved previous literature that professional healthcare providers are not the source of influences for attitude change in the context of dietary supplements. In addition, the findings also recognized that "word of mouth (WOM)" has the most obvious influencing impacts on the people's attitude towards dietary supplements. Nevertheless, the information sources do not have significant effects on the purchase intention of dietary supplements compared to their individual self-determination. The research suggested that no matter how different information sources, consumers are more inclined to make purchase decision based on their self-determination regardless of the influences of information sources.

Chapter 1.Introduction

The underlying process of attitude change would be a challenging study and it is interesting to identify how an individual's opinions are formed and changed. That is the reason why information are important since the purpose of them are crucial when it comes to attitude change and decision making process. People always make hundreds of decision either it can be a complex decision or more simple choices. Depending on how simple or difficult a decision is, people need more input or information from external sources. If people are completely rational, then their beliefs would be grounded with logic and evidence, but the questions emerge who they trust the most and who can make their attitude and decision change on account of being emotionally influenced by other people.

The importance of information and the mechanism of persuasion behind them has been acknowledged in many environments like politics and marketing. In the context of marketing, information are essential from all perspectives of customers, competitors and the companies themselves. From the customer point of view, depending on the products, services, and industries, they are likely to believe experts, peers like word of mouth or media or advertisements if they would like to know about either a product or a company.

It is important for every business to recognize the customer's preferences and opinions so that they can provide the information of their products and services to them by choosing the most effective mean of information. Some certain sectors like getting

healthcare services when the customers need to make high investment decisions, they may have a high possibility of dependency on high credibility sources like the experts such as physicians and professionals healthcare providers. In some cases, making decisions do not need much time, investment or efforts which is why people are more inclined to consult with informal sources like families and friends. And, in many cases, people engage in performing activities directed by their own intuition because people sometimes unexpectedly have the propensity of having skepticism about being manipulated by outside influences of information.

The interest of current research is being motivated by the widespread use of dietary supplements in the global food supplement industry in recent years but the nature of the product can neither be categorized under pharmaceuticals products being used by professionals nor an ordinary consumer product.

When diet and nutrition become important in order to keep healthy lifestyles for the present generation, the demand for vitamin supplements and additional supplements becomes higher. Some occasional dietary supplement products are used for meal replacement or the alternative way to skip meals, the majority of the product ingredients are botanical which benefits are not scientifically proven that raised questions about the recommendation by the healthcare professionals. The use of dietary supplements all over the world becomes common both in the Western and Asian countries in recent years. As a result, researches have been done to examine the underlying factors of dietary

supplement consumptions in developed nations, women in particular as well as the athletes, university students etc.

Zion market research mentioned that global dietary supplement market is expected to reach USD 220.3 billion in 2022, and is predicted to grow at an annual growth rate of 8.8% between 2017 and 2022. It can be said that the impact of media growth both in pharmaceutical and retail industries in combination with the fast growing development in dietary supplements products have strong influence on the market growth.

Asia Pacific dietary supplement market is the fastest growing and is expected to grow with the annual growth rate of 11.2 % from 2016 to 2024. In Japan, alternative medicines like dietary supplements are essential and daily requirement due to the growth of aged population and the young generation. In ASEAN countries like Singapore and Malaysia, the dietary supplement market becomes promising and shows the positive growth rate because of the increasing numbers of urban population and middle-class consumers.

Myanmar becomes one of the fastest growing countries in South East Asian region with political and economic reforms within last few years. International Healthcare companies start expanding and seeking opportunities in this untapped market. According to the market research companies, Myanmar pharmaceutical market has been growing with around 11-12% of growth rate per annum and the market is expanding in terms of both quality and range of the available products. The market survey done by Rubicon Strategy in collaboration with DKSH, one of the International pharmaceutical companies in Myanmar, mentioned that the consumers have strong preference for high quality

Western medicines. The report also claimed that the strongest consumer growth can be found in the regions of adult mouth care, analgesics, nutritional products, children medicines, vitamins and dietary supplements. The country's both high and middle class become very concerned with the healthcare and consume daily supplements. The interest of this research stems out particularly for this uprising market which consumers' behavior are still unexplored for dietary supplement consumption.

While the consumer's interest in the dietary supplement market is growing instantly, physicians are not the individual source for consumers to get information about the products. Although historically, there was a number of inevitable decent reasons to hold the aids from dietary supplements, a huge debate is still going on for and against of dietary supplement consumption. Some studies showed that healthcare professionals sometimes have uncertainty of the safety and risk of these products but the market keeps on growing within past few years.

Physician recommendation and information can be specified as having high credibility and they can be the convincing influencers for choosing a certain pharmaceutical product but in the dietary supplement market environment, these products are not claiming for curing specific disease or illness but they are recognized only for management of pain and sickness, weight loss, bodybuilding, energy boosting and antiaging.

There have been a number of concerns about the instant effectiveness and safety of dietary supplements and consumers have been warned about the incorrect use and the quality of the supplements. However, a number of previous literatures explained that

healthcare professionals themselves have positive insights about dietary supplement consumption nowadays.

Dickinson et.al (2001) pointed out that "even the healthcare professionals like physicians and nurses are also as interested as the general public about the benefits come from the aids of rational supplementation". However, some researchers also claim that most popular supplements do not follow the claims and increase the risk of other possible disease. According to Willet & Stampfer (2001), there are some contradictory arguments about consuming dietary supplements by medical and nutrition experts for ensuring adequate intakes and potential effects to some chronic diseases claims.

When the professional healthcare providers have uncertainties about the safety and effectiveness of dietary supplements, it is important and interesting to know which sources of information is the most influencing factor for the consumer's attitude towards the dietary supplements consumption because information sources are not particularly related with the credibility of the professions.

The different context of pharmaceuticals products and dietary supplements brings about the companies the means of promoting their products not only through physicians but also through advertisements both online and offline. The number of people using various social media stimuli grow intensely and companies are more engaging both with social media and traditional style of marketing (radio, television, and printing) for sharing product information and building the relationship with the customers.

Nowadays, social media becomes one of the easiest, least expensive and most effective way for the companies to generate their business publicly. Dietary supplements which are neither food nor medicine can be accessible generally in health and food stores, pharmacies, much more widely in supermarkets and are sold through mail order, television or even through the internet. "Dietary supplements products, according to Thompson and Troester (2002), can be purchased without a prescription in grocery and drug stores or via the Internet and patients often do not seek professional guidance prior to their purchase and use."(Samojlik et.al, 2013, pg-835; Owens, 2014, pg-109)

Companies utilize large investments for marketing and engage in advertising of dietary supplements through different kinds of media and people can get information about them through a number of sources. Some of the advertisements of dietary supplements use emotional appeals and story-telling content in their advertisements too. Since dietary supplement products information are accessible through different kinds of information sources, the interest of this research particularly becomes from which sources people commonly get the information about these products? Which external source of information than professional healthcare providers have the most influencing impacts on consumer's attitude and consumption for dietary supplements consumption?

Some of the previous studies for dietary supplements consumption mentioned that dietary supplements users are generally knowledgeable about the products than non-users. According to Kalsher, Michael J., et al (2004), attitude and beliefs about dietary supplements are differed according to the function of their gender, education status and

whether they have taken dietary supplements. They also suggested that individual differences are necessary to be taken into account of consumption of these products.

Noor.,et al (2014) mentioned that: "An individual's opinion about the health-related benefit gained from a dietary supplement can be recognized as an important motivational factor for dietary supplements intake" where people educate themselves and use their common sense taking these supplements.(pg-6-26) Bailey et.al (2011&2012) also mentioned that: "Dietary supplement intake is the highest in groups of people who are the least likely to need supplementation to their diet because their nutrition intake from food is already sufficient".(pg-261-266) It appears undeniable that customers have their own motivation and purpose to buy these products although they are not effected by external influences.

Research Questions

The proposed research questions for this current research are:

- 1. Among three different information sources; professionals, WOM (word of mouth) and media, which external source of influence has the most significant impact on the individuals about their attitude and purchase intention of the products?
- 2. Are sources of influence have the significant influence on the attitude towards and purchase intention of customers?

3. Can individual's self-determined motivation be the moderating factor that impacts on the effectiveness of external influence for attitude change and decision making process?

The above-mentioned research questions are targeting for the private healthcare marketing sector particularly for the dietary supplement marketing where the consumer behaviors for these products are differed both from prescription medicine and traditional medicine.

Research Purpose

The primary purpose of this thesis is to examine the influencing sources of the consumers' attitudes and purchase intention of dietary supplements. This research addresses the research gap of comparing three main information sources; experts (professional healthcare providers), Word of mouth and media. It will allow us to understand and discover which one of these sources is considered as the most influencing stimulus by the consumers when it comes to dietary supplement intake and further approves that professional healthcare providers are not the most influential information sources for dietary supplement marketing.

The second objective is to measure the individual's self-motivation to purchase the dietary supplements without being restricted or manipulated by outside normative pressures. Understanding the factors impacting the consumers' attitude and purchase behavior for the dietary supplements would be a great contribution not only for the marketers but also for the consumers. In other words, this research is supposed to give

further attentions to previous researches about the importance of information for dietary supplement consumer's attitude and decision making process.

Chapter 2. Literature Review

2.1 Attitude towards information source and Credibility

Information are important in individual's social, physical and symbolic environment and they always observe what other people like family members and friends are engaging in. Furthermore, Mead,EL et.al.,(2014) mentioned that the information provided by other people may lead individuals to believe that their ideas and behaviors are prevalent and acceptable.

In the marketing environment, Cosenza et al., (2015) claimed that "When consumers need information to make a decision, they start searching for information sources that would provide adequate product information". This claim has been affirmed by Pavlou & Fygenson (2006) stating that searching for information sources and decision making processes are related because consumers have to engage first in the product information search and then buy it. In consumer-direct marketplaces, the information that consumers can find should be unbiased and appropriate. Chen (2008) further explained that people, when they are trying to find the product information, check interpersonal sources such as other consumers, neutral sources like experts and product sellers, namely, retailers.

Product information are now accessible from a number of sources. They can be the experts' opinions, personal reviews and experiences, other information channels like traditional media and through the internet. Traditional media include print sources such as newspapers, magazines and brochures. In addition to these established communication channels, social media becomes a tool to seek information and is the one such technology that has seen increased usage as an information source. (Pepitone, 2010; Westerman, David et al., 2014)

Nowadays, word of mouth becomes one of the most basic information sources that companies consider an effective marketing tool since consumers trust the others who already had the experience. Customers communicate with each other and they share their experiences and reviews rather than being the marker's information receiver. The information-procession process has unique capabilities which the marketers should take advantage for.

American marketing association mentioned that Word-of-mouth plays as a critical role for communication for the brand choice process. Ed Keller and Brad Fray, the writers of "The Face-to-Face Book; Why Real Relationships Rule in a Digital Marketplace" did the research for the American citizens, stated that people always engage in the conversation about the product and brand related-information on daily basis. Moreover, 90% of these conversations are offline and around 8% of the conversation are exchanged through social media.

However, Chen et al., (2016) suggested that consumers do not value different information sources equally as some sources may be perceived as more trustworthy than other. A number of previous researchers also mentioned that perception of the expertise and trustworthiness of a source affects the way a message is received and processed. (Eadie et al., 1984; Swenso et al., 1984; Greenburg & Wursten, 1988; Geer, 2003)

Because "individuals' motivation to comply with a perceived norm changes the impact of that norm on their attitudes and behaviors, as proposed in the theory of reasoned action/planned behavior". (Ajzen and Fishbein, 1980; Ajzen, 1991)

Depending on the different information sources and products, the attitude towards information through which the receiver obtain would be differed particularly if the person who receives the information does not have prior knowledge or limited knowledge about the product. When customers have never heard about a brand or when they never consider to buy a product or a service by this brand, the possibility that some connections who suggest the product or service to them will most likely affect the customer's behavior. (Naz, F, 2014)

The type of product information to which consumers are exposed can be an important determinant of consumer preference which is why the information sources are crucial for customers. Eisend (2014) claimed that "source of credibility is effective to influence and persuade consumers". This claim is further confirmed that "Source trustworthiness, expertise, and attractiveness were found to play a significant role in informational and social influence". (Maddux & Rogers, 1980; Kiecker& Cowles, 2001; Fanoberova & Kuczkowska, 2016)

2.2 Dietary Supplement and sources of influences

Over the last decades, the sales of dietary supplements like vitamins and minerals, nutritional and herbal products have been dramatically growing. Companies are using multiple sales channels for these products not only through traditional marketing like physicians and doctors, they are undertaking direct to consumer marketing activities. Unlike prescription drugs, products like dietary supplements can be advertised through media in such a way that media development has fueled up the strong dominance of dietary supplement market across the globe. "Supplements are often advertised using celebrity endorsers and expert testimony that are shown to increase likability and believability of the advertisement". (Wu et al., 2012; Devon S et al., 2017).

Dietary supplements are recommended as an alternative medicine and they are differed from generic drugs which are necessary to be prescribed by the professional healthcare providers. People are likely to buy themselves although they are not required to take these products. These products do not belong to the prescription medicines that are only available with the written instruction of the professional pharmacist or doctor. Nor they are intended to cure, treat or diagnose the diseases. But people heard a lot of encouraging news and information about these products that lead their enthusiasm for taking them on daily basis.

In their research in 2017, Devon S et.al explained that the factors determining consumer attitudes using dietary supplements may be influenced by certain biases present in consumer decision-making. "Most of the respondents indicated a preference for dietary supplements to conventional pharmaceuticals for treating medical conditions or to

maintain health." (Owen, 2014). As a result, these people feel that the professional healthcare providers do not have much knowledge about their own body and how they are feeling. "They often feel they are more knowledgeable about their individual health than an "out-of-touch" doctor who haphazardly prescribes medication to reactively treat a particular ailment rather than address a patient's holistic condition". (Thompson & Troester, 2002)

Customers are more likely to get the information about the dietary supplements from their friends, family members and colleagues as well as having the inclining dependency on the online information for product information and even for the decision making process. "For every person who takes a supplement that's medically warranted, experts say more of us are taking something because our neighbor or colleague swears by it".(O'Brien,2016)

Dietary supplements not only can be available through typical pharmacies and drugstores, they can also be purchased in the supermarkets and through online order. In pharmacies and drugstores, they operate with certified healthcare professionals which can provide adequate information and high level of recommendation to the people during their purchase in order to choose the safe product. At the same time, purchasing the products by online has been expanding in recent years because of the increasing usage of the internet. Information about the dietary supplements also are delivered through social media.

How people perceive the information about dietary supplements they receive from their family and friends, from the advertisements through their favorite celebrities or the experts and prescribers? Do they feel identical about the same products depending on the different sources or their attitude towards dietary supplements are changed based on the different external sources? Or all kinds of dietary supplement users like the heavy users, the regular users, the occasional users and the rare users are self-directed consumers? Because people often manipulated or moved by external factors but people, at the same time, are motivated s by their own interests, curiosity, and values.

The distribution and marketing platforms or resources for dietary supplements products are important to utilize for communicating with the consumers. Consequently, marketers should be actively seeking which sources are more powerful and effective for direct to consumer marketing for these products.

This study investigates three different types of sources, namely – experts (professional healthcare providers), Word Of Mouth and media through which consumers get the information, their perceived credibility for the information sources, and the influences on attitude towards dietary supplements. Then, it will examine the impacts of these external influences for the purchase decision process. Because, attitude, subjective norms and personal are interrelated each other in the process of decision-making.

Technically, the researcher did not find any previous researches for the accurate topic about sources of influences and self-determination for dietary supplement industry where products can either be recommended by the professional healthcare providers or can be purchased as over-the-counter products regardless of the particular prescription.

The current research aims to initiate the empirical research about the role of external influences and individual self-determination for attitude change and decision-making process for dietary supplement.

Chapter 3. Conceptualization

3.1 Theoretical Framework and Hypotheses

In this research, the theory of reasoned action (TRA) by (Ajzen & Fishbein 1967) and Self-determination Theory (SDT) are employed as a theoretical framework. In order to explain the relationship between human attitude and behavior, the TRA theory predicted that people have a high intention or motivation to behave or perform an activity if their attitude is positive especially once people believe that family members, friends (subjective norms) want them to perform the behavior. The strong correlation between attitude and subjective norms to behavioral intention have been confirmed by a number of researchers too.

According to TRA, the individual behavioral intention is determined by person's attitude towards behavior and subjective norms. Person's attitudes towards the behavior predict whether he or she will engage in a behavior according to either positive or negative evaluation of the probability of performing a behavior. And subjective norms are a perception of social pressure from outside in order to perform a behavior.

Social expectations of other people like parents and friends are also can be considered as the determinant of deciding the individual's behavior. "Subjective norms of an individual are based on external information that they are available from people who surround the individual and he or she being encouraged by the social pressure to engage in an activity or behavior". (Park, 2000) For example, they are the perceived social pressure an individual faces when it comes to making a decision for behaving in a certain way by complying with those significant others.

Many studies reported that a person's attitudes toward a behavior and subjective norms are sufficient determinants of his/her behavioral intention (e.g., Bowman & Fishbein, 1978; Goldenhar & Connell, 1992; Jaccard & Davidson, 1972; Jones, 1990; Vinokur-Kaplan, 1978; Park, 2000). Both personal and social factors are influencers according to TRA for individual's likelihood of engaging in a specific behavior. (Park, 2000) Ajzen (1998) also claims that both of these personal and social factors can affect the behavioral intention as a predictor of engaging in a behavior.

In contrary to the social factors that can influence the individual's behavioral intention, his or her own attitude towards behavior is internally generated. They are constructed on their own interest, beliefs about the potential outcome of the specific behavior which is supported by their evaluation of the consequences from the behavior.

So, in this current research, an individual's social pressures or source of influence and his or her personal attitude (self-determination) towards behavior are considered as the predictors or functions of individual's behavior. The relationship between outside influence and persuasive messages or information about the products encourages a favorable or positive attitude towards the information. And also with the products which ultimately can encourage the positive behavioral intention.

Most importantly, in relation with these behavioral intentions in context with the dietary supplement products, we realize that professional healthcare providers are not the exclusive sources of information who have impacts for attitude change and purchase intention. And, professionalism is expected to be scarcely related with the consumption of the products. Instead, there is an alternative mean of information which covers the

widespread influence on consumer's attitude and purchase intention because this is the rare phenomenon when the nature of the products can neither be categorized as medicines nor the consumer products. Based on the previous literature review and theoretical background, we hypothesize that,

H1 – While external influence has strong impacts on customer's attitude, word-of mouth is the most effective in influencing customer's attitude towards dietary supplements.

Individual attitude can positively or negatively affect a person's behavior. Since a person's attitude can be influenced by his or her environment, the person who has positive attitude towards the people near him or her, in other words, can influence their behavior. It is important to make a note that external information sources can emotionally influence a person's behavior. So, we hypothesize that,

H2 – External influence has positive effects on the consumption of dietary supplement products.

It is also important to take note that human beings make their own decision if their intention are not pre-ordained when their attitude are more rational and their beliefs are on the cause and effect which the incident works. Self -determination theory by Deci & Ryan 1985; Ryan & Deci 2000, is a broader framework to study the human motivation and personality. The formal theory defines both the intrinsic and various extrinsic sources of motivation. The theory depicts that people have three different psychological needs; autonomy, competence and relatedness which foster the highest quality form of motivation and engagement in the activities. (Lee, 2011)

According to Ryan& Derci (2000), people feel motivated by the activities which allow them to satisfy their performance, persistence and creativity. And these activities are driven by intrinsic motivation. By definition proposed by Derci & Ryan (2000), intrinsic motivation obviously is engaging in behavior for their own sake, for example; on the level of inherent interest, enjoyment, and satisfaction. In contrast, extrinsic motivation is defined by engaging in activities or behaviors for an expected outcome like rewards, social acceptance etc.

SDT framework has been applied in human behavior-specific implications such as families, classrooms, organization, and clinics in order to understand the practices and structure that either enhance or reduce the needs satisfaction and functions that follow it. Ryan & Derci (2002, 2012, and 2017) claimed that the theory of self-determination focuses on the degree of an individual's behavior which is motivated and determined by themselves. They also affirmed that people who are intrinsically motivated have the highest level of self-determination. They undertake behaviors according to their interest and inherent satisfaction.

According to Hagger et al., (2002), SDT is grounded on the concept of the people behaving according to their psychological need for self-determination. Through intention, self-determination has been claimed to have both direct and indirect effect on behavior by aforementioned researches. Using this SDT theory in the context of dietary supplement consumption, this research proposes that people have their own capability to evaluate the products and behave according to their own acute consciousness but without

being heteronomous or controlled. That is why individual's self-determination or motivation is expected to have the positive effects on their own attitude and making a decision. From the perspective of SDT, we hypothesize,

H3 - High level of self- determination moderates the effects of external influences on consumer's attitude towards the dietary supplements.

And,

H4 – High level of Self- determination has a positive effect on purchase intention of the dietary supplements.

3.2 Conceptual Framework

On the basis of the above theory discussion, the following conceptual framework has been developed and proposed by using two behavioral theories: Theories of reasoned action (TRA) and Self-determination theory (SDT).

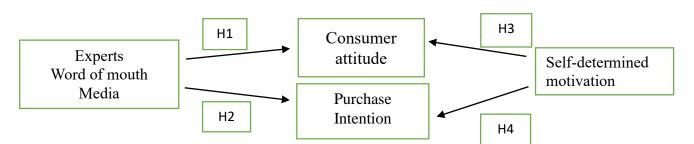


Figure (1) Conceptual Framework

The purpose of the hypothesis (1) is to study the relationship between the external information sources and consumer's attitude and to examine the level of influences between three different sources on the attitude towards the dietary supplements claiming that word-of-mouth is the most influential information source for consumers. The second

hypothesis is to examine the effect of external influence and purchase decision of dietary supplement users. The main purpose of the hypothesis (3) is to investigate the influence of self-determined motivation, to argue that the self-determined motivation has a strong relationship with the consumer's attitude. Consequently, the final hypothesis for this research is to examine the relationship between self-determination and purchase intention for dietary supplement claiming that the higher the self-determination level, the less the external source of information has impacts on consumer's behavior.

Chapter 4.Research Methodology

4.1 Conducting the survey

For better and deeper understanding of the impacts of influencing sources and own intuition for attitude formation and purchase decision process of consumers, this research employs the case study Myanmar market for a specific dietary supplement. The reasons why the dietary supplement market in Myanmar is chosen for this research is first, Myanmar dietary supplement market has been gaining momentum since last few years back. Secondly, people become more health conscious especially urban population and they are seeking more opportunities for good quality products and services uniquely in the healthcare industry. The custom of doing physical exercises together or going to the gym become popular in urban population specifically in the middle age people. Most people think that regular medical check-ups are also important to have a healthy life and believe that having a healthy lifestyle implies looking good and feeling good. As a result, people are inclining to take preventive measures for a healthy lifestyle through diets and nutrition. The dietary supplement market in Myanmar is still in its infant stage and still need to explore the link that exists between the sources of influences on the consumers of dietary supplements. Moreover, how the level of individual's self-consciousness does has a connection with the attitude and purchase intention of consumers.

4.2 Measurement

This research designs the survey questionnaires and employs them with the actual dietary supplement consumers in two main local cities in Myanmar. A brochure for one dietary supplement product advertisement is designed to make the experiment along with the survey questionnaires which includes 27 questions in total. In order to test the hypothesis (1), the questionnaires are designed with five different sets of questions based on 3 different sources of influence on the attitude towards dietary supplements and their self-motivation process with 5 different section of questionnaires. And respondents are given the brochure and answer their purchase intention about the product after seeing the advertisement to test their willingness to buy the product.

The detailed of the survey questions are mentioned both in English and local language where the survey has been engaged in the annexure (1) and (2). The results of the survey provide how the respondents perceive the dietary supplements and their insights to the consumption of dietary supplements.

The survey questions are grouped according to the five main topics:

- 1. Attitude towards dietary supplements
- 2. Consumer judgments for the use of dietary supplements
- 3. Consumer's psychology empowerment
- 4. Purchase decision of dietary supplements

The survey for this research was carried out in Myanmar from February-March 2018 and SPSS software in Excel was applied for the data analysis in order to get the results.

The questionnaire was developed in English and then was translated into local language in order to engage in Myanmar. The translated version has been cross-checked by the local translator before applying them in the research survey.

4.2.1 Measurement for three different information sources

The influence of three different situational determinants is measured by 5 different sets of questions which includes one (5 Likert scales) questions and four multiple choices questions. In order to test another independent variable "self-determination", three different sets of questions are divided in order to examine the self-actualization, psychological empowerment, and self-determination. These questions are intended to test the hypotheses 3 and 4 about the relationship between the individual determinant; the level of influence by self-determination on the attitude towards the dietary supplements.

Two sets of different questions such as the knowledge about dietary supplements and the general personal history questions are added in order to have better information of the participant so that the results can easily differentiate according to their age group and their personal knowledge about the dietary supplements. The participants can be both those who are taking dietary supplements and those who are new to dietary supplements.

A professional pamphlet for one dietary supplement product which is not in the market yet will be launched in near future has been designed and applied in the last section of the questionnaire as an experiment so that the result can be applied in the real-

life situation. This product has been chosen from one of the local food supplement marketing company (San Lwin Trading Co.Ltd).

The reason using the real product is to use the research findings into the practical situations since the brand is already established in the local market. The dietary supplement brand used in the survey "Nature Bounty" is already familiar to the customers and well-established brand in the market for almost 3 years. There is a variety of product line under this brand imported from the USA.

The product used in the brochure is "Odorless garlic 1000 mg" which can be used both by men and women. The brochure is printed which includes both English and local language with the usages and effects of the product. The brochure also covers the information about the country of origin and the distributing company to give the respondents full information about the product used. The questionnaires along with the advertisement brochure are shown in appendix-1.

4.2.2 Research Independent and Dependent Variables

This research has two independent variables and two dependent variables namely attitude, outside influence, self-determination and purchase intention. Self-determination and outside influence are independent variables whereas attitude and purchase intention are counted as dependent variables. The first hypothesis is to test the relationship between outside influence and attitude towards dietary supplements, the second hypothesis is to examine the effect of outside influence on purchase intention of dietary supplements. The aim for the third and fourth hypotheses is to observe whether there is the positive relation

between self-determination both with attitude and purchase intention of dietary supplements.

i. Attitude towards dietary supplements

The first variable "attitude" comprises following 5 -points of Likert scales questions. The Cronbach's alpha value of this variable is 0.782.

Question (1)	I feel confident after taking dietary supplements.
Question (2)	I feel healthier after taking dietary supplements.

The collected data were analyzed by Analysis of Variance (ANOVA) with "attitude" and "purchase intention" as dependent variables. "Source of information" and "self-determination" were independent variables. Multiple comparison tests with the p-value (0.05) were also performed among the means value of the independent variables. The value of each respondent's response for "attitude" was indicated by the sum of scores of the following questions. The independent variable "self-determination" is tested by the sum of scores of two questions then build into the new variable "self-determination level" with high (1) and low (0).

ii. Purchase Intention of Dietary supplements

The next dependent variable "purchase intention" is calculated by three 5-points Likert scales questions and the outcome of the Cronbach's alpha value is 0.865 which gives the strongest internal consistency among four variables.

The three 5-Likert questions are used to test the second dependent variable "purchase intention"; the first question is about the "likelihood", the second question is asking about consumer's "willingness" and last question is asking whether they would make effort to buy the dietary supplement. And all three questions are combined to make one dependent variable "purchase intention" to test hypothesis 3 and 4. For the first two questions, the respondents are given 5 answers to choose - "very likely", "likely", "neutral", "unlikely" and "very unlikely". For the last question to test their effort to purchase the product, the provided answers are "strongly agree", "agree", "neutral", "disagree", "strongly disagree".

The following table compiled the three questions for the second dependent variable "purchase intention".

Question(1)	The likelihood of purchasing this dietary supplement is.
Question(2)	My willingness for purchasing this dietary supplement is.
Question (3)	I will make special effort to purchase this dietary supplement.

4.3 Sampling

The total sample population in this research is 120 Myanmar citizens with the age from 18 to over 60, both male and female residing in two main cities Yangon and Mandalay in Myanmar. The research employs simple random sampling (SPS) and sample population includes both dietary supplement users and non-users.

The reason for choosing these two cities is the major market share of the dietary supplement in the country is covered by these two cities. A total of 127 responses are collected and empty responses or incomplete responses are removed in order to clean up the data and 120 complete responses remained in total.

The total of 120 individuals: 41 male (34.2%) and 79 females (65.8%) participated in the survey who already had previous experience in the use of dietary supplements and those who are very new to the supplements. The following table shows the definition of the target population of the survey for this research.

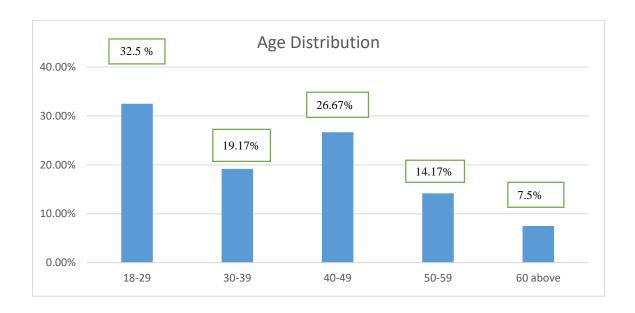
Table (1) Demographic figure of participants in the survey

18	8-29	30)-39	40)-49	50)-59	60	above	Total
Male	Female									
16	23	9	14	5	27	8	9	3	6	
	39		23		32		17		9	120

The major participants in the survey were from the age category of 18 to 29 years with total 32.5 % in this research. The second most participant's ratio is between 40-49

years old participants with 26.7 % and people above the 60 years of age are the least participants in this survey with 7.5 %. Out of 120 participants.

Figure (2) Category of respondents by age



4.4 Data Collection Process

Table (2) Classification of data collection process

Population	Sampling unit	Geographical area	Period of survey	
Adult population of Myanmar (men & women 18 yrs. to 60s)	Individuals	Two major cities in Myanmar	Feb-26th to Mar- 22nd 2018	

Data collection is carried out in two cities in Myanmar from 26th February to 22nd March 2018. In Yangon, questionnaires were distributed to selected five different

pharmaceutical stores and questionnaires are recollected after one week time. The same procedure was done in Mandalay. Moreover, questionnaires were given to the people who came to the particular sales counter of "Nature Bounty" products in one big supermarket. Any respondent who participated in this research survey is given a small present as a token of gratitude after they finished filling the answers for all questionnaires. Total 156 questionnaires are distributed and the overall respondents were 127(81%). The following table shows the general data collection process done for this research.

Chapter 5. Research Findings

This section will discuss the results of the survey divided into two parts; descriptive data analysis and hypothesis testing. The outcomes of the survey will not only explain about the results of hypotheses testing but also elaborate the insights of respondents from different perspectives like having a healthy lifestyle, their attitude about the pharmaceuticals products, consumption of dietary supplements. The research results show the correlation between sources of influences and attitude towards dietary supplements. Furthermore, the results point out the relationship between self-determination and purchase intention of consumers.

First of all, the survey organizes the general perception of health-related lifestyles, respondents' perceptions of generic medicines, their dietary supplement intake as well as their general information about the dietary supplement consumption pattern.

I. Descriptive Analysis

5.1 Awareness and knowledge about Healthy lifestyle

From the point of view of the health consciousness and having a healthy lifestyle, the results from the survey show that majority of respondents share the same opinion of feeling important to be healthy and they are concerned about their health condition. Almost 51 % of total respondents said they pay attention to their health condition but less than 40% of the respondents do not feel that they are not very much aware of their

healthcare condition. Getting regular health check-up does not apply to most of the participants. 59% of total participants do not make regular check-up, especially to 18-29 years old participants and half of the respondents, share the same idea about maintaining body-shape is not important to them. With respect to awareness of the healthcare related information, almost 60% of the respondents do not search or look for healthcare related information despite 10% of the respondents are active participants who always look for healthcare related information. There are some contradictions between their perception of having a healthy lifestyle and their health-related routine.

5.2 Dietary supplement consumption pattern

The following diagram shows the consumption patterns of the participants and 50 % of the respondents take dietary supplements one time per day, 31.7 % rarely take the dietary supplements and only 6% of the respondents take dietary supplements more than twice per day. It can be said that the respondents represent the group of people who are familiar with the dietary supplement consumption. But, almost 7 % respondents represent people who have never taken dietary supplements.

As per gender distribution, almost 50% of female respondents answered they take dietary supplements once per day. Dietary supplement intake is accessed by asking the respondents how long they have been taking the dietary supplements for with three different time frame; less than 6 months, one year and more than one year. The majority

of the respondents take dietary supplements not more than 6 months with 53 % and nearly 35 % take dietary supplements more than one year.

Table (3) Consumption patterns of dietary supplements

Intake of dietary supplement

		Frequency	Percent	Valid Percent	Cumulative Percent
	More than twice per day	7	5.8	5.8	5.8
	One time per day	60	50.0	50.0	55.8
	Every alternative day	7	5.8	5.8	61.7
	Rarely	38	31.7	31.7	93.3
	Never	8	6.7	6.7	100.0
•	Total	120	100.0	100.0	

5.3 Motivation factors of dietary supplement consumption

In this research, the correlation between the motivating factors behind dietary supplement consumption in relation both with gender and age are analyzed too. As a whole, the most frequent answer to the motivation for taking dietary supplements is to improve the current health condition (35%). According to the results of the survey, the respondents have the opinion that taking dietary supplements will bring about positive effects to improve their current physical and mental conditions. The second reason for consuming the dietary supplement is to lower propensity of getting sick and disease with the total percentage of 21.7%, followed by the third reason of relieving anxiety with 20%. The most significant reason for the age group of 18 to 29 respondents, the result shows

taking a dietary supplement is in order to improve their figural goodness or appearance than other participants with different age category. Overall results of the motivation factors behind dietary supplements consumption is presented in the following table.

Table (4) Motivation Factors for dietary supplements consumption

Reasons	Frequency	Percentage (%)
Improve current health condition	42	35.0
Lower propensity to get sick or disease	26	21.7
Figural goodness or appearance	20	16.7
Anxiety disorder	24	20.0

5.4 Information Sources

Testing the sources of influence about the dietary supplements, the respondents are given seven different sources to know the most frequent source that people are inclined to search for the information about the dietary supplements.

Table (5) Source of information about dietary supplements

Sources of information	Frequency	Percentage (%)
Physicians, medical doctors or a nurse	40	33.3
Family or friends	41	34.2
Company brochures	9	7.5
Salesperson	10	8.3
Magazine, journals, books	5	4.2
The internet	10	8.3
Television or radio	5	4.2
Total	120	100

The information source from which people try to search about the dietary supplements are family and friends with 34.2 %. Physicians and doctors including nurses contribute 33.3% as source of information for consumers. In order to make the results of the research more concrete, we try to categorize these seven sources of information under three categories for the purpose of better hypothesis analysis as mentioned in Table-5.

Table (6) sources of influences

1) Healthcare Professionals	Physicians, Doctors, Nurses	33.3 %
2) Word of mouth	Family and Friends	34.2%
3) Media	Company brochures Magazines, journals, books The internet Television, radio	16.7%

As a result, out of three sources of information sources, the responses show that people tend to get the information about the dietary supplements mostly through Word of Mouth than Healthcare professionals like doctors and nurses, unlike prescription drugs.

The results about the sources of influences for using dietary supplements show that their families and friends are the most influencing sources to recommend them for using dietary supplements (27.5%) and doctors also are the second most powerful sources of influences for the respondents with the results of 26.7%. 10% of respondents give the answer that they have never been recommended by any of these sources or people to take dietary supplements.

The following histogram of sources of influences illustrates that the peak data "word -of -mouth" out of three sources of influences.

Histogram

Mean = 1.68
Std. Dev. = .648
N = 120

1.00
2.00
3.00

1- Professional Healthcare providers, 2- Word of Mouth, 3-Media

Figure (3) Distribution histogram for sources of influences

5.5 Psychological satisfaction

This research also examines the satisfaction level of the respondents regarding their health condition, physical appearance, and emotional state to understand their psychological situation of either they feel satisfied or relaxed or anxious about their overall pleasure depending on both physical and mental fitness. Referring to the answers from the survey, almost over half ratio of respondents show that they feel satisfied for their current health condition, they feel satisfied for their physical appearance and they

feel relaxed about their emotional state of mind. The complete figure of the responses for "overall satisfaction level" is summarized in table (6).

Table (7) Percentage of respondents with an overall satisfaction level

Satisfaction level	Health Condition	Physical Appearance	Emotional / mental
Very satisfied	5.8%	5.0 %	5.0 %
Satisfied	55 %	46.7 %	51.7 %
Neutral	35.8 %	43.3 %	40.0 %
Unsatisfied	3.3 %	4.2 %	3.3 %
Very unsatisfied	-	0.8 %	-

5.6 Dietary supplement consumption

The category of dietary supplements used by 112 respondents is described in the above figure (4) excluding 8 respondents who never take dietary supplements. A total of 30.36% of respondents take multivitamins and minerals supplements followed by 16.96% of Omega-3 supplements users. Fairly high usage of dietary supplements by most female respondents are Evening Primrose oil with 8.93% and 8.04% of the respondents take hair, skin, nail supplements. Vitamin E, Collagen and Hair, skin, nails supplements also contribute to lower percentage according to the responses from the survey. A small

percentage of ABC plus, Calcium and Probiotics are consumed by respondents within the age group of 50 to 59 and 60-above.

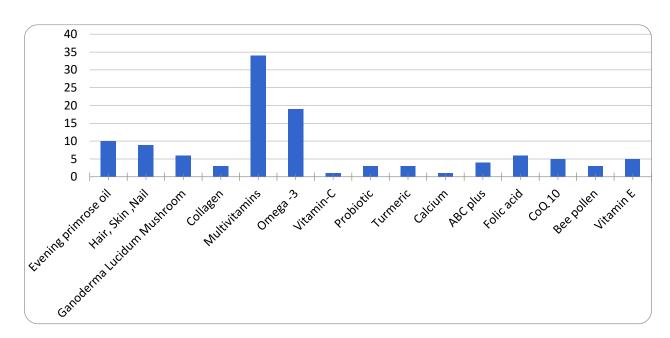


Figure (4) Category of dietary supplement consumption

People who take dietary supplements are asked whether they checked the nutritional labels when they start taking a dietary supplement for the first time. The majority of dietary supplement users do not check the national labels since 29.2% show that they "rarely" check the nutritional labels. 26 % of the respondents said they "sometimes" check the labels whereas 23% said they check nutritional labels on the products "most of the time". Almost 9% "never" check when they start taking a dietary supplement for the very first time.

5.7 Perception of generic medication

Before testing the hypotheses, the respondents are asked about their attitude towards generic medication in order to know their knowledge and insights. Results after screening all 120 respondents show their perception of generic medication. A significant proportion of the respondents (54.2%) show that they "often" think the generic medication can be effective for curing the diseases or sickness while only a few percentages of the respondents (10%) have very positive perception and believe that generic medication can "always" cure the diseases. Detail explanation about the perception of generic medication between groups of people with low and high self-determination level in second part of this chapter.

5.8 Attitude towards dietary supplements

Respondents are asked their attitude towards dietary supplements and results show that common answers spread between "significantly" and "neutral". The respondents are given to choose from 5 different answers to express their attitude towards the dietary supplements whether they feel confident and healthier after taking dietary supplements; 1) strongly 2) significantly 3) neutral 4) not much and 5) Not really. If we look at the following figure, the investigation shows that the peak data occurs at 2.5.

Attitude

Attitude

Attitude

Strongly significantly Neutral not much not really

Attitude

Figure (5) Percentage of Customer's Attitude towards dietary supplements

It can be seen that active members of respondents expressed that they feel "neutral" about the benefit of dietary supplements.

5.9 Purchase intention of advertised dietary supplement

Distribution histogram of the dependent variable "purchase intention" shows mean value of 2.78 and within the range from 1 to 5 (very likely to very unlikely), the peak data contributes in "3" which represents "neutral". According to this distribution histogram, the purchase intention of the respondents is inclining that their enthusiasm for

purchasing the product is questionable. However, considerable figures of respondents (27.5%) express "likely" for purchase intention of the dietary supplement advertised.

Figure (6) Frequency of purchase intention for an advertised dietary supplement

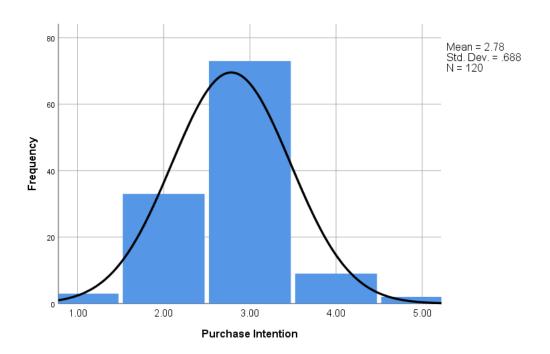
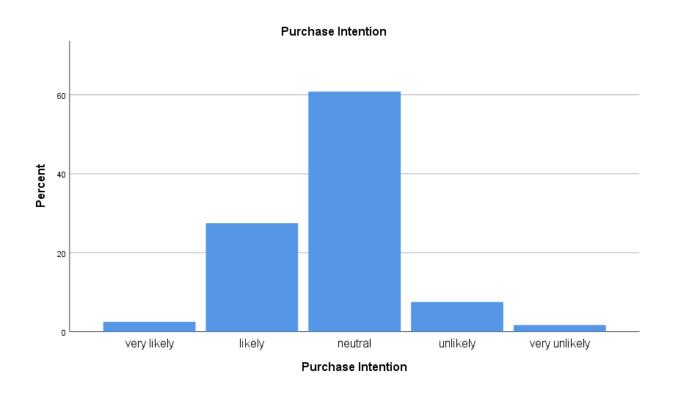


Figure (7) shows that respondents are more likely to feel "neutral" regarding the purchase intention of the advertised dietary supplements. About 60% of the respondent's answers reflect the empowerment of their self-determination than the influence of the external information source like the advertisement despite the fact that over 20% of the answers contribute that they are "likely" to buy the product.



5.10 Relationship between sources of influence and motivation of supplement consumption

A further attempt to examine the relationship between the motivation behind the supplement consumption and sources of outside influences, the research also runs the cross tabulation between three different sources and motivation factors for supplement users. The following tables shows the different sources and motivation factors of respondents by cross tabulation and chi-square tests results.

Based on the results, the total respondents of the people who show the reasons for taking dietary supplements as "to lower the propensity to get sick or disease", the most

important and frequent source people tend to rely on is "professional healthcare providers". Out of all results, the source of information "Word of Mouth" is the most frequent source for the respondents when their objective is to lower the propensity to get sick or disease or getting better shape or appearance. And both WOM and media are stronger source of information than professional healthcare providers when people's motivation behind taking dietary supplements is for figural goodness.

Table (7) Source of influence & motivation for taking dietary supplements

Source of influence	To improve current health condition	Lower propensity to get sick or disease	Figural goodness or appearance	Anxiety Disorder	Total
PHP	11.61	13.39	2.68	7.14	34.82%
WOM	17.86	5.36	8.93	12.5	44.64%
Media	8.04	4.46	6.25	1.79	20.54%

PHP- Professional Healthcare Providers, WOM – Word of Mouth

Table (8) Chi-square Tests for source of information & motivation factors

Chi-Square Tests

			Asymptotic Significance (2-
	Value	df	sided)
Pearson Chi-Square	26.107 ^a	8	.001
Likelihood Ratio	24.736	8	.002
Linear-by-Linear Association	1.584	1	.208
N of Valid Cases	120		

a. 4 cells (26.7%) have expected count less than 5. The minimum expected count is 1.93.

As mentioned in the above table, the value of Pearson chi-square value is 26.107 with the observed significance level of the Pearson chi-square value is 0.001 which is less than 0.005 and the results suggest that the source of information and the motivation factors of taking dietary supplements are highly associated with each other.

5.11 Relationship between sources of influence and age groups

Further analysis for the relationship between the source of information and different age groups, their use of dietary supplements and average satisfaction level are also examined in this research to give the important outcomes of the significance and importance of the source of information. The following table shows the most significant source of information which people associate with in accordance with the dietary supplements.

Table (9) Information source and age group cross tabulation

Information source * Age Cross tabulation share

	Age						
		18-29	30-39	40-49	50-59	60 above	Total
Information	1.00	10.83	10.0	6.67	5.0	0.83	33.33%
source	2.00	10.83	4.17	15.0	6.67	5.83	42.50%
	3.00	10.83	5.0	5.0	2.5	0.83	24.17%
Total		32.5%	19.2%	26.7%	14.2%	7.5%	

¹⁻Professional Healthcare Providers, 2-WOM – Word of Mouth, 3-Media

The respondents who are the age group of 40-49 represent that the most frequent group of people who get the information about dietary supplements from their friends and families. Although the result of the age group 18-29 contribute the same to all three kinds of source of information, respondents of the age between 30-39 mention that they are more inclining to get the information from professional healthcare providers. In general, the results of the survey indicate that "Word of Mouth" has higher tendency of getting dietary supplement information for all respondents.

5.12 Information source and types of dietary supplements

An attempt to study about three different kinds of information sources and types of dietary supplements are also tested in order to know whether healthcare professionals have more credibility than other two sources of information when it comes to recommending the different kinds of products. According to the results, the respondents get information about products like evening primrose oil and hair, skin, nail products particularly for women's figural goodness from media and through word of mouth rather

than from healthcare professionals. The most common products like Multivitamins and Omega-3 are recommended both by professional healthcare providers and through word of mouth. But, all respondents who take ABC plus supplements said they got recommendation about this product particularly from professional healthcare providers.

Table (10) Information source and types of dietary supplements

Types of dietary supplement	Professional healthcare providers	Word of Mouth	Media
EPO	6.98	10.87	8.7
Hair,skin,nail	4.65	6.52	17.39
Ganoderma	2.33	6.52	8.7
Collagen	2.33	2.17	4.35
Multivitamins	27.91	34.78	26.09
Omega-3	20.93	17.39	8.7
Vitamin-C	0.0	0.0	4.35
Probiotic	4.65	2.17	0
Turmeric	2.33	2.17	4.35
Calcium	0.0	0.0	4.35
ABC plus	9.3	0.0	0.0
Folic Acid	9.3	2.17	4.35
Bee Pollen	2.33	6.52	4.35
CoQ10	2.33	2.17	4.35
Vitamin-E	4.65	6.52	0
	39.39%	41.07%	20.54%

ii. Data Analysis

The second section of this chapter will explain the hypotheses testing of this research.

Hypothesis Testing

In order to test the hypothesis (1), "While external influence has strong impacts on customer's attitude, word-of mouth is the most effective in influencing customer's attitude towards dietary supplements.", this research engages One Way ANOVA and multiple regression test. In order to know the difference between three different sources of influences, the independent variable "outside influence" or "source of information" is categorized into three different sources 1) professional healthcare providers 2) Word of mouth and 3) Media. The means of these three different influences show 2.58, 2.6897 and 1.6667. This research further employs multiple regression analysis to examine the relationship between two variables and the result shows with the p-value of 0.01. Table (10) shows the means values of three different source of influences with regard to the dependent variables of "attitude" and "purchase intention".

Table (11) Dependent variables means by sources of influences

Independent variables

Dependent variables	PHP	WOM	Media	Average
Attitude	2.5800	2.6897	1.6667	2.5417
Purchase Intention	2.8250	2.7410	2.9167	2.7833

The value of p is less than 0.05 which indicates the significant difference between three sources of influence and attitude towards dietary supplements. The dependent variable which has the most significant relationship with consumer's attitude is "word-of-mouth". The result shows that the sources of influences significantly have a positive relationship on the consumer attitude towards dietary supplements and supports the first hypothesis. The results further approve that "word-of-mouth" has the most influencing impacts on attitude towards dietary supplements.

An attempt to further analyze this result, we decided to run the "cross tabulation test" to examine about the influences of sources on two groups of supplement consumers regular users and non- regular users with the values of 1 representing "regular users" and 2 for "non-users". For those respondents who answered they take dietary supplements 1) more than two times per day and 2) one time per day and 3) every alternate day, we classified them as "regular users". And for those who answered they take dietary supplements 1) rarely and 2) never before are classified into "non-users".

Once again, the frequency of people who got influenced by three different kinds of sources and points out that although "professional healthcare providers" are the most influencing source for "regular users" but the difference between the first source and the second source of influence "word-of-mouth" does not show a significant difference. Instead, the results show that the most influencing source for "non- regular users" is "word-of-mouth" out of three information sources. "Word of Mouth" therefore is the most powerful source of influence for consumers from which they get information and motivation for consuming dietary supplements.

As for the hypothesis (2), "External influence has positive effects on the consumption of dietary supplement products," this research applies the same one way ANOVA test and the means of three different source of influences show 2.82, 2.7241 and 2.9167. The p-value of the study showed 0.178 which is higher than 0.05. The result shows that each source of influence does not have a significant effect on the purchase intention of the customers for the dietary supplements and the hypothesis (2) is not supported.

Testing hypothesis H3: "High level of self- determination has positive effects on consumer's attitude towards the dietary supplements", we divide the independent variable "self-determination" into two separate groups of respondents 1) with a high level of self-determination and 2) with a low level of self-determination. The reason for dividing these two separate groups will allow us to know whether there is the significant difference between two groups of people, whether they have a different attitude towards dietary supplements. And further will explain whether these two groups have particular

purchase intention within and between groups. The mean for each group is 2.5088 for "lower self-determination" group versus 2.5714 for "high self-determination" group. According to the multiple regression analysis results, the p-value is 0.636 which represents the significantly greater value of 0.05. That is why we conclude that hypothesis is not supported as shown by the results.

The last hypothesis H4 is "High *level of Self- determination has a positive effect on purchase intention of the dietary supplements*" and we employ the same analysis dividing between two groups of people with low and high self-determination level. The mean values of two groups are 2.9123 versus 2.6667 respectively with a p-value of 0.05. The results have shown that there is a more significant relationship between the high level of self-determination and the individual's purchase intention than the lower level.

Table (12) Hypotheses testing results by multiple regression analysis

independent variables	dependent variables	p value	remarks
Source of influence	attitude	0.01	supported
Source of influence	purchase intention	0.178	Not supported
self-determination	attitude	0.636	Not supported
self-determination	purchase intention	0.05	supported

Table (13) Means scores of low and high self-determination towards attitude and purchase intention

	Independent variables				
Dependent variables	(Self-determination)				
- · · · · · · · · · · · · · · · · · · ·	Low	High	Average		
Attitude	2.5088	2.5714	2.5417		
Purchase Intention	2.6667	2.9123	2.7833		

The research also examines whether the regular users and non-users of dietary supplements have different perception about prescription drugs, and their healthcare-related awareness between two groups of people. The means value of regular users and non-regular users about the perception of pharmaceuticals products are 2.2703 and 2.2609. There is no significant relationship between the supplement consumption and perception of prescription drugs but the results show that regular users of the dietary supplement have more positive perception than non-regular users.

From the perspective of healthcare awareness between two groups, the means value of awareness of healthy lifestyle, the results show regular supplement consumers have a high level of awareness in accordance with having healthy lifestyle than non-regular users of dietary supplements with the mean values of 2.3243 and 2.3043 (p-value - 0.862).

Further attempt to observe the purchase intention of different age groups and gender whether these two variables can be moderating factors for purchase decision process, the research also runs regression analysis but the results show there is no relationship between the different age groups and gender since the p-value of age is 0.489 and p-value of gender is 0.251 which is larger value than 0.05. The mean values of men and women for the purchase decision are 2.3902 for men respondents and 2.6203 for women which depicts that women have higher purchase intention than men respondents.

The mean values among the different age groups for purchase intention for the advertised dietary supplement is also analyzed and are mentioned in the following table.

Table (14) Means scores of different age groups towards attitude and purchase intention

Dependent variables	Independent Variable (Age)					
	18-29	30-39	40-49	50-59	60 above	Average
Attitude	2.4872	2.5217	2.6562	2.5294	2.4444	2.5417
Purchase Intention	2.6410	2.8696	2.8750	3.0000	2.4444	2.7833

Within five different age groups, the respondents of groups "3" (age between 40-49) and group "4" (age between 50-59) show highest means values both for attitude and purchase intention particularly respondents age between 50 to 59 are the most likely to purchase the advertised dietary products with the mean value of 3.0000 while respondents

of the age between 40 to 49 have the most positive attitude towards the dietary supplements with the mean value of 2.6562.

In order to examine are there any different satisfaction level of supplement users and non-users, the research tries to explore extensively for each level of satisfaction which includes their level of satisfaction for a current health condition, physical appearance, and mental state. The following table mentions the means values of overall satisfaction level of dietary supplement regular users and non-users.

Table (15) Means scores of satisfaction level between supplement users and nonusers

Satisfaction level

Supplement users	Health condition	Physical appearance	Mental state
Users	2.3514	2.4730	2.3649
Non-users	2.3913	2.5217	2.5000
Total	2.3667	2.4917	2.4617

The means values of supplements users and non-users in above-mentioned table describe that the regular users of dietary supplements have a lower level of overall assessments of feelings and attitudes towards well-being, physical appearance in terms of mood than non-users of dietary supplements. The relationship between the dietary supplement consumption and their satisfaction level was also tested and the result shows

the p value of 0.967. The results show that dietary supplement consumption does not have a positive relationship with the satisfaction level of people and surprisingly non-users have a positive attitude towards their life-satisfaction.

Chapter 6.Discussion

The findings give interesting observations for the objective of the research showing the relationship between outside influences and the inner balance of intrinsic motivation of customers for attitude towards and purchase intention of dietary supplements. It assists one of the initial objectives of this research for identifying the source of information which has the most powerful influence for consumers regarding the attitude towards the dietary supplements.

It seems obvious that users have a more positive perception about dietary supplements than non-users and they have a higher level of concerns about having healthy lifestyles but their level of satisfaction is lesser than non-users of dietary supplements. It also seems noticeable that taking dietary supplements do not give the users physical and psychological satisfaction although they keep on taking the products.

The first two hypotheses which are based on the theory of reasoned action highlights the importance of outside sources of information for attitude towards the products or services. According to the theory, the extrinsic motivation obviously has influences on changing the attitude of consumers towards products or services. External reinforcement which can either be tangible or psychological rewards such as having the better physical appearance or having a healthy lifestyle from the sources of information or influence can exert more powerful influence on individuals. The research proves that the outside influences or motivation have the significant effects on the attitude of

consumers towards dietary supplements but having a positive attitude does not necessarily lead to the purchasing them.

The study also points out that respondents normally turn to one or more sources for additional help in the case of dietary supplements information and among three tested sources of information, "word-of-mouth" is the most powerful and influential source for consumers in accordance with attitude towards dietary supplements and further confirms the claims by Silverman (2001) that "WOM is perceived as natural, authentic and very trustworthy than other marketing tools". (Silverman, 2001)

The results also support the previous literature in such a way that dietary supplements consumers do not concern to take a recommendation from professional healthcare providers. This research happens to give the result of the weak significant relationship between the influencing sources and purchase intention of the products but the results claim that the purchase decision process of the consumers are affected more by their inner state of self-determination than outside motivation which further support the final hypothesis of the research.

Self-determination theory from which the research construct the last two hypotheses about the relationship between self-determination and attitude towards dietary supplements proposes that people's inner self-determination either high or low level, do not have significant positive effects on attitude towards the dietary supplements. The results showed that regardless of the level of individual self-determination, people have a neutral attitude towards dietary supplements consumption.

While the outcome for testing the effect of self-determination on the purchase intention of consumers show an acceptable significance level, we carefully conclude that people's inner self-motivation has more valid consequence than sources of influence in relation with the purchase intention of consumers. Both people with high level of self-determination and low level of self-determination show a positive effect on the purchase intentions and proves that the more the individual is highly intrinsic-motivated, the more it has a positive influence on the purchase intention.

Sources of influences obviously have impacts on the consumer's attitude towards dietary supplements which supported our main intention of this research by demonstrating that they are powerful and effective than individuals own consciousness concerning attitude change process. However, the results of the dominance of outside influences and extrinsic motivations are not perceived as significant biases in decision-making stage for consumption of dietary supplements especially when the level of consumers' self-determination is high. According to Prino (1996), "A person of high-self-confidence feels good about him/her and thinks he\she can deal with most things he\she faces, successfully."

As explained in chapter(3),main hypotheses of this research are based on two theories; theory of reasoned action(TRA) and Self-determination theory, the first theory suggests about the normative pressures on attitude and behavior whereas Self-determination theory(SDT) argues that consumers who have high level of self-determination behave what they feel determined or confident about. Partly because of the

influences from outside information, customers often come to have different attitudes and these influences have impacts on customers' perception about products. But, their self-determination or intrinsic motivation leverages in the decision-making process when they are exposed to a product without any external dominance.

Although globalization of dietary supplement markets has impacts on the consumer's values and attitude, there would be the fundamental difference between consumers depending on their geographic, demographic and psychological interferences regarding the predispositions towards dietary supplements. The results from this research point out that the potential impacts of outside influences on the purchase decision of consumers appear to be moderated by the inner self-determination of each individual consumer.

Customer's perceived beliefs, involvement, and inspiration are absolutely associated with their decision making process although dominance of outside information alters their way of thinking and attitude towards products. Unlike the attitude change process where consumers do not need to lose anything either they do or do not change their perception of the product, it can be concluded that purchase decision of consumers are more complicated process since they need to decide whether they will choose the particular product or not. That is the reason they need to consider many other factors other than the influence of the peer pressure such attributes as the brand reputation, price.

Chapter 7. Conclusion

In conclusion, this research demonstrates the sources of influences which has impacts on attitude towards dietary supplements in private healthcare industry. First, this research clearly shows the relationship between the influences of external motivation by information sources which has positive impacts on consumer's attitude. In addition, the results of the research pointed out that out of three information sources, word-of-mouth is the most influencing information source both for dietary supplement users and non-users. Information sources do not have any significant effect on the customer decision-making process. Instead, the research proves the effectiveness of individual's self-determination and its potential influences on customer's purchase- decision stage and gives the new perception of the interrelationship between people's self-confidence in contrast with outside normative influences for purchase intention for a dietary supplement.

Secondly, this research indicates that dietary supplements users have a high level of health awareness but their opinions on satisfaction assessments for physical and mental health are lower than non-users of dietary supplements which give the interesting point of view. While the global dietary supplement market enlarging considerably, for those researchers who are interested in dietary supplement markets, consumer's attitude and related consumer purchase intention can further explore more research in order get more expansive empirical knowledge. Especially this research give a considerable awareness and reference for dietary supplement marketers as well as the researchers so that they

can reflect the connection between the outside influences and inside motivation which are contradictory yet contribute both to attitude and purchase decision process.

Additionally, examining the role of self-determination level as a mediator between outside influence and purchase intention, this research intends to support the theoretical contribution and also benefits for marketing practitioners. Finally, this research encourages for supporting further extensive research for a wider range of population and fulfill the current knowledge provided by this particular research. Last but not the least, the ultimate goal of this research is to give the new understanding to marketers, healthcare providers and consumers about the untouched research area of dietary supplement marketing in developing countries like Myanmar.

It is expected that this research can give a better understanding of consumer's attitude and purchase decision specifically for dietary supplements which will allow marketers to develop appropriate marketing tools better by considering the emotional influences from consumers. The more the market becomes more demanding and dynamic, this research is intended to give extensive evidence of the relationship and benefits of external variables on the consumer attitudes mediated by the individual's inner motivation for performing the behavior.

Limitation and Further Research

It is important to understand and point out the shortcomings of this research since there are restrictions on the credibility level for the conclusions of the testified hypothesis in this research. First of all, the sample population in this research might not be represented the broader level of population in Myanmar since we did the survey only in two big cities which we consider as the best possible sample location for dietary supplements users. Particularly, the sample population represents people who we consider having a considerable same general background information like the level of education, knowledge about dietary supplements out of the urban population.

Although the sample population can be considered relevant for this particular research there would be the possibility of different results for the same analysis if the research is done for other areas different from these two cities which future researcher can address. And the designated research area is one of the developing countries in South East Asia, thus the generalizability of this research results cannot be considered to represent the total population of dietary supplements users too. Exploring the future research in different developing countries in the Asian region will provide further contradiction which can be contributed to emerging dietary supplement markets.

Secondly, we carefully need to examine that there is a considerable ambivalence in different individual's inner state of determination level and consumer's values which we do not consider in this research. Further similar studies can be done from another point of views such as the correlations between different personal values, different sources of

influences and particular influencing factors for attitude towards and consumption pattern of dietary supplements. And the product being used in the survey is designed for this specific research reason and we cannot confirm that we can reflect the same results if a different type of product and the comparative study between different countries of origin is applied to the research.

One of the most important points to be considered is about the reliability of one of the variables in this research since the Cronbach's alpha value of "outside influence" unfortunately need to be reviewed. Although this research contributes the most influential sources of recommendations especially among three different sources which have impacts on the consumer's attitude and it would bring about more solid results if the Cronbach's alpha value of this variable is developed and constructed so that it can strengthen the higher consistency for future research.

Marketers can use the results of this research when they try to segment their market and to target particular individuals by looking into providing relevant information about alternative medicine and using most influential sources of information. From the advertiser's perspective, they can design their advertising themes differently by taking into consideration of consumer concern on health issues and knowledge from the psychographic dimension.

References

Aghdaie, S. F., & Khatami, F. (2014). Investigating the Role of Self Confidence and Self-Image Proportion in Consumer Behavior. *International Journal of Marketing Studies*, 6(4). doi:10.5539/ijms.v6n4p133

Bailey RL, Gahche JJ, Lentino CV, Dwyer JT, Engel JS, Thomas PR, et al. Dietary supplement use in the United States: 2003-2006. J Nutr 2011;141:261-266.

Bink, M. L., Marsh, R. L., Hicks, J. L., & Howard, J. D. (1999). The Credibility of a Source Influences the Rate of Unconscious Plagiarism. *Memory*, 7(3), 293-308. doi:10.1080/096582199387931

Bhutta ZA, Makrides M, Prentice AM (eds): Health and Nutrition in Adolescents and Young Women: Preparing for the Next Generation. Nestlé Nutr Inst Workshop Ser, vol 80, pp 117–140, (DOI: 10.1159/000360356) Nestec Ltd., Vevey/S. Karger AG., Basel, © 2015

Bowman, C. H., and Fishbein, M. 1978. Understanding public reaction to energy proposals: An application of the Fishbein model. *Journal of Applied Social Psychology*, 9: 319–340

Chen, Y. & Xie, J. (2008). Online Consumer Review: Word-of-Mouth as a New Element of Marketing Communication Mix. Management Science, 54(3), 477-491.

Chen, J., Teng, L., Yu, Y., & Yu, X. (2016). The effect of online information sources on purchase intentions between consumers with high and low susceptibility to informational influence. Journal of Business Research, 69, 467-475.

Conner M, Norman P, Bell R: The theory of planned behavior and healthy eating. Health Psychol 2002; 21: 194–201.

Conner, M., Kirk, S. F., Cade, J. E., & Barrett, J. H. (2003). Environmental Influences: Factors Influencing a Woman's Decision to Use Dietary Supplements. *The Journal of Nutrition*, 133(6). doi:10.1093/jn/133.6.1978s

Consumers express fears about dietary supplements. (n.d.). Retrieved February 07, 2018, from http://vietnamnews.vn/opinion/your-say/200700/consumers-express-fears-about-dietary-supplements.html#9E4bs4vgjXF27Svy.99

Deci, E.L. & Ryan, R.M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum Press.

Devon S.Johnson, Brreagin K.Riley, Shintaro Sato, (2017) "The adverse effect of doctors' skepticism toward prescription drugs", International Journal of Pharmaceutical and Healthcare Marketing, Vol. 11 Issue: 3, pp.222-234,

Dickinson, A., Boyon, N., & Shao, A. (2009). Physicians and nurses use and recommend dietary supplements: report of a survey. *Nutrition Journal*, 8(1). doi:10.1186/1475-2891-8-29

Eagly, A. H., & Chaiken, S. (1993). The psychology of attitudes. Fort Worth, TX: Harcourt Brace Jovanovich

Fletcher RH, Fairfield KM. Vitamins for chronic disease prevention in adults; clinical applications. JAMA. 2002;287:3127–3129. doi: 10.1001/jama.287.23.3127.

"Healthcare in Asia Reports » Bull City Lawyer." *Bull City Lawyer*, bullcity.lawyer/asia-healthcare-shop/

Hee Sun Park (2000) Relationships among attitudes and subjective norms: Testing the theory of reasoned action across cultures, Communication Studies, 51:2, 162-175, DOI: 10.1080/10510970009388516

Johnson, M. K., Hashtroudi, S., & Lindsay, D. S. (1993).Source monitoring. Psychological Bulletin, 114(1), 3-28. doi:10.1037//0033-2909.114.1.3 Gul, L. W. (n.d.). Neural substrates of intrinsic motivation: FMRI studies. Retrieved from http://www.bing.com/cr?IG=61177C4B13CD4B1BA3DE10609E41499C&CID=04250 68BAF7668F1001A0D7EAE8B698B&rd=1&h=l9VttBknJfHGg5ZFqKBUx82ybFFZ8 xBfjtnsiQn7IJw&v=1&r=http://ir.uiowa.edu/cgi/viewcontent.cgi?article=2718&context =etd&p=DevEx.LB.1,5498.1

Jaccard, J. J., and Davidson, A. R. 1972. Toward an understanding of family planning behaviors: An initial investigation. *Journal of Applied Social Psychology*, 2: 228–235.

Jones, R. E. 1990. Understanding paper recycling in an institutionally supportive setting: An application of the theory of reasoned action. *Journal of Environmental Systems*, 19: 307–321.

Kalsher, Michael J., et al. "Assessing Peoples Knowledge and Beliefs about Dietary Supplements." *PsycEXTRA Dataset*, 2004, doi:10.1037/e577092012-023.

Kim, H. S., Lee, H. Y., & Kim, M. K. (n.d.). Dietary Supplements Use and Related Factors of Preschoolers in 3 Korean Cities. Retrieved February 07, 2018, from https://synapse.koreamed.org/DOIx.php?id=10.5223%2Fpghn.2013.16.2.104

Kim, S.H., Jan, J.H., Qin, Y.Z. and Keen, C.L. (2003), "Use of Vitamins, Minerals and other Dietary Supplements by 17-and 18-year-old students in Korea", Journal of Medicinal Food, 6(1), 26-42

Laurent Muzellec, Director MSc. in Digital Marketing Follow. (2015, February 09). Ewom credibility on social networking sites a framework. Retrieved February 07, 2018, fromhttps://www.slideshare.net/LaurentMuzellec/ewom-credibility-on-social-networking-sites-a-framework

Malek, Lenka, et al. "Understanding Drivers of Dietary Behavior before and during Pregnancy in Industrialized Countries." *Health and Nutrition in Adolescents and Young Women: Preparing for the Next Generation Nestlé Nutrition Institute Workshop Series*, 2014, pp. 117–140., doi:10.1159/000360356.

Most U.S. Consumers Believe Unbiased Information Trumps Accuracy When Making Medical Decisions, says Accenture Survey. (2014, November 12).Retrieved fromhttps://www.businesswire.com/news/home/20141112005154/en/U.S.-Consumers-Unbiased-Information-Trumps-Accuracy-Making

Naz, F. (n.d.). Word of Mouth and Its Impact on Marketing - IJSRP. Retrieved from http://www.bing.com/cr?IG=7A72B8DDD33C4077B8E6F232E9463CAF&CID=05DAF82F099A68413FC4F3DA086769E8&rd=1&h=WRhoX8BZ2GqTySVO7UP-vYGDmWvUTZNm60DSQ5c51F8&v=1&r=http://www.ijsrp.org/research-paper-0114/ijsrp-p25121.pdf&p=DevEx.LB.1,5500.1

Noor, N.A.M., Yap, S., Kok-Hong, L. and Rajah, E. (2014), "Consumer attitudes toward dietary supplements consumption", International Journal of Pharmaceutical and Healthcare Marketing, Vol. 8 No. 1, pp. 6-26.

Owens C, Baergen R, Puckett D (2014) Online sources of herbal product information. Am J Med 127: 109-115.

Owens, C., & Toone, T. (2014). A Survey of Dietary Supplement Knowledge, Attitudes, and Use in a Rural Population. *Journal of Nutrition & Food Sciences*, 4(5). doi:10.4172/2155-9600.1000304

Pavlou, P.A, & Fygenson, M. (2006). Understanding and predicting electronic commerce adoption; An extension of the theory of planned behavior. *Management Information System Quarterly*, 30(1), 115-143.

Pajor, E., Eggers, S., Curfs, K., Oenema, A., & Vries, H. D. (2017). Why do Dutch people use dietary supplements? Exploring the role of socio-cognitive and psychosocial determinants. *Appetite*, 114, 161-168. doi:10.1016/j.appet.2017.03.036

Pedia-Lax | Healthcare Professionals - Pedia-Lax® Resources & Overviews - Pedia-Lax® Relevant Articles - Physicians & Nurses Recommending Supplements. (n.d.). Retrieved February07, 2018,fromhttp://pedia-lax.com/healthcare-professionals/relevant-articles/study

Pepitone, J. (March 10, 2010). Twitter users not so social after all. *CNNMoney.com*. Retrieved March

14, 2010 from http://money.cnn.com/2010/03/10/technology/twitter_users_active/index. htm?hpt=Mid

Research, Z. M. (2018, April 12). Global Dietary Supplements Market Size Will Grow USD 220.3 Billion by 2022. Retrieved from https://globenewswire.com/news-release/2018/04/12/1469339/0/en/Global-Dietary-Supplements-Market-Size-Will-Grow-USD-220-3-Billion-by-2022.html

Samojlik I, Mijatovic V, Gavaric N, Krstin S, Bo? in B (2013) Consumers' attitude towards the use and safety of herbal medicines and herbal dietary supplements in Serbia. Int J Clin Pharm 35: 835-840.

Self-Determination Theory: Intrinsic and Extrinsic Motivation. (n.d.). Retrieved from https://academy.sportlyzer.com/wiki/motivation/self-determination-theory-intrinsic-and-extrinsic-motivation/

Silverman, G. (2001). The power of word of mouth. Direct Marketing, 64(5), 47–52

Steenkamp JBEM: Dynamics in consumer behavior with respect to agricultural and food products; in Wierenga B, Tilburg A, Grunert K, et al (eds): Agricultural Marketing and Consumer Behavior in a Changing World

The Power of Word of Mouth. (n.d.). Retrieved from

 $\frac{https://www.ama.org/publications/MarketingNews/Pages/The-Power-of-Word-of-Mouth.aspx}{Mouth.aspx}$

Thompson, C., & Troester, M. (2002). Consumer value systems in the age of postmodern fragmentation: The case of the natural health microculture, Journal of Consumer Research, 28, 550-571.

Vinokur-Kaplan, D. 1978. To have-or not to have-another child: Family planning attitudes, intentions, and behavior. *Journal of Applied Social Psychology*, 8: 29–46.

Webb, D., Soutar, G. N., Mazzarol, T., & Saldaris, P. (2013). Self-determination theory and consumer behavioral change: Evidence from a household energy-saving behavior study. *Journal of Environmental Psychology*, *35*, 59-66. doi:10.1016/j.jenvp.2013.04.003

Westerman, David, et al. "Social Media as Information Source: Recency of Updates and Credibility of Information." *Journal of Computer-Mediated Communication*, vol. 19, no. 2, Aug. 2013, pp. 171–183., doi:10.1111/jcc4.12041.

What is Self-Determination Theory? (PDF). (2017, March 07). Retrieved from https://positivepsychologyprogram.com/self-determination-theory/#psychological-needs

Willett WC, Stampfer MJ. Clinical practice: What vitamins should I be taking, doctor? N Engl J Med. 2001;345:1819–1824. doi: 10.1056/NEJMcp010710.

Wu, W., Linn, C.T., Fu, C. and Sukoco, B.M. (2012), "The role of endorsers, framing, and rewards on the effectiveness of dietary supplement advertisements", Journal of Health Communication, Vol. 17.No. 1, pp. 54-75.

Zakaria, N., & Mustaffa, C. S. (2014). Source Credibility, Risk Communication, and Well-being: A Conceptual Framework. *Procedia - Social and Behavioral Sciences*, *155*, 178-183. doi:10.1016/j.sbspro.2014.10.276

Appendix 1- Advertisement Brochure

Front Page



Advertisement Brochure (Back Page)



Survey questions (English version)

•	intake of a dietary wice per day 2) o		y 3) every alt	ternative o	day 4) rarely 5)
answer that fits 1. My of 2. Low 3. Figure	supplements becau your current situat current health cond er propensity to ger ral goodness or appliety disorder	ion) ition t sick or disease		for impro	ving (check any
first time?	check the nutrition tys 2) Most of the		•		
	onfident after takin 2) Significantly	• • • •		ot much	5) Not really
5. I feel healthi	er after taking dieta	ry supplement	S		
1) Strongly	2) Significantly	3) Neutr	al 4) No	ot much	5) Not really
6. Do you sea sources?	rch for information	n about the di	etary supplem	nents from	n the following
 Family 6 Compar The sale Magazir The inte 	y brochures esperson at a store nes, journals, books				
7. Have you ev	ver been recommen	ded a dietary sı	ipplement by	the follow	ving people?
1) Doctor	2) Pharmacists	3) Friends	4) Family	5) Medi	ia

8.	1) Almost All 2) Many of them 3) Some of them 4) Few 5) None
9.	Are there a lot of people taking dietary supplements in your surroundings? 1) Yes 2) No 3) Don't know
1.	People in your surrounding would approve me taking dietary supplements. 1) Strongly agree 2) agree 3) Neutral 4) Disagree 5) Strongly disagree
11.	How satisfied are you with your current health condition? 1) Very Satisfied 2) Satisfied 3) Neutral 4) Unsatisfied 5) Very Unsatisfied
1.	How satisfied are you with your physical appearance? 1) Very Satisfied 2) Satisfied 3) Neutral 4) Unsatisfied 5) Very Unsatisfied
13.	How satisfied are you with your mental state? 1) Very Satisfied 2) Satisfied 3) Neutral 4) Unsatisfied 5) Very Unsatisfied
14.	I always pay attention to my health condition. 1) Strongly Agree 2) Agree 3) Neutral 4) Disagree 5) Strongly Disagree
15.	I look for the healthcare related information.1) Strongly Agree 2) Agree 3) Neutral 4) Disagree 5) Strongly Disagree
16.	I have a regular health check-up. 1) Yes 2) No
17.	I take care of my body-shape? 1) Strongly Agree 2) Agree 3) Neutral 4) Disagree 5) Strongly Disagree

18. Choose the answer that BEST describes you.
I usually do what my friends, family want or suggest. Never Always
1 2 3 4 5 6 7 8 9 10 I usually do what I think it is good for me.
Never Always 1 2 3 4 5 6 7 8 9 10 I am afraid of doing things wrong.
1 2 3 4
I know what I do best.
1) Agree 2) Disagree
19. I believe that pharmaceutical products can cure sickness or disease.1) Almost Always 2) Often 3) Sometimes 4) Rarely 5) Never before
20. The likelihood of purchasing this dietary supplement is.
1) Very likely 2) Likely 3) Neutral 4) Unlikely 5) Very Unlikely
21. My willingness to buy this dietary supplement is.
1) Very likely 2) Likely 3) Neutral 4) Unlikely 5) Very Unlikely
22. I would make special effort to buy this dietary supplement.
1) Strongly agree 2) agree 3) Neutral 4) Disagree 5) Strongly disagree
23. Age group
18- 29 30-39 40-49 50-59 60 and above
24. Gender
Male Female

25	. Please mention the types of	f dietary supplement	ts that you are now taking.
i. ii. iii. iv. v. vi.			······································
26	. I have been taking dietary	supplements for	
	1. Less than 6 months	2) one year	3) more than one year
27	. I have the following chroni	ic disease	
	 Hypertension Diabetes Gout Heart problem Gastrointestinal disease Other None 		

Survey Questions (Myanmar Version)

ယခုလက်ရှိ သောက်သုံးနေသော ဖြည့်စွက်စာ အကြိမ်အရေအတွက်ကိုဖော်ပြပါ။

၁)တစ်နေ့လျှင် နှစ်ကြိမ်နှင့်အထက် ၂) တစ်နေ့တစ်ကြိမ် ၃) တစ်ရက်ခြား တစ်ခါ၄) ရံဖန်ရံခါ ၅) လုံးဂမသောက်ဖူးပါ။

အောက်ပါအခြေအနေများပေါ် တွင်ကောင်းမွန်သောအကျိုးသက်ရောက်မှုရှိသောကြောင့် သောက်သုံး သောက်သုံးခြင်းဖြစ်ပါသည်။(တစ်ခုထက်ပိုသော အဖြေကို ဖြေဆိုနိုင်ပါသည်)

- ၁) ကျွန်ုပ်၏ လက်ရှိကျန်းမာရေး အခြေအနေကို ပိုမိုတိုးတက်ကောင်းမွန်စေသောကြောင့်
- ၂) ရောဂါ ဖြစ်ပွားခြင်း (သို့မဟုတ်) ဖျားနာခြင်း တို့ကို ကာကွယ် စေသောကြောင့်
- ၃) ကိုယ်ခန္ဓာပိုမိုကြည့်ကောင်းစေရန် နှင့် နုပျိုလှပစေသောကြောင့်
- ၄) စိတ်ကြည်လင်ပေါ့ပါးလန်းဆန်းစေသောကြောင့်

ဖြည့်စွက်စာကို မသောက်သုံးမီ ဆေးဘူးခွံပေါ် ရှိ ပါလင်ပစ္စည်း များကို စစ်ဆေးပါသလား။ ၁)အမြဲတမ်းနီးပါးစစ်ဆေးပါသည်၂)အများအားဖြင့်စစ်ဆေးပါသည်၃)မကြာခကစစ်ဆေးပါသည် ၄) စစ်ဆေးမျမရှိသလောက်၅) လုံးလမစစ်ဆေးပါ။

ဖြည့်စွက်စာသောက်သုံးပြီးနောက် မိမိကိုယ်ကို ယုံကြည်မှုတိုးတက်လာပါသည်။ ၁)အလွန်အမင်း၂)သိသိသာသာ၃)ပုံမှန်သာဖြစ်ပါသည်၄)သိသိသာသာတိုးတက်မလာပါ ၅) လုံးဂတိုးတက်မလာပါ။

ဖြည့်စွက်စာသောက်သုံးပြီးနောက် ပိုမိုကျန်းမာ လာသည်ဟုခံစားရပါသည်။ ၁)အလွန်အမင်း၂)သိသိသာသာ၃)ပုံမှန်သာဖြစ်ပါသည်၄)သိသိသာသာတိုးတက်မလာပါ ၅) လုံးဂတိုးတက်မလာပါ။

ဖြည့်စွက်စာနှင့်ပတ်သက်သော အချက်အလက်များကို အောက်ပါတို့မှ ရရှိပါသည်။

- ၁) ဆရာဂန် (သို့မဟုတ်) သူနာပြု (သို့မဟုတ်) ကျန်းမာရေးဂန်ထမ်း
- ၂) မိသားစု (သို့မဟုတ်) သူငယ်ချင်း အသိမိတ်ဆွေ
- ၃) လက်ကမ်းစာစောင်များ
- ၄) ဆေးဆိုင်ရှိ အရောင်းစာရေးများ

- ၅) မဂ္ဂဇင်း၊ ဂျာနယ်၊ စာအုပ်များ
- ၆) အင်တာနက်
- ၇) ရုပ်မြင်သံကြား (သို့မဟုတ်) ရေဒီယိုကြေငြာများ

ဖြည့်စွက်စာသောက်သုံးရန်အောက်ပါပုဂ္ဂိုလ်တို့မှညွှန်ကြားခြင်းသို့မဟုတ် အကြံ အကြံဉာက်ပေးခြင်းတို့ရှိပါသလား။

၁) ဆရာဂန် ၂) ဆေးဂါးကျမ်းကျင် ၃) သူငယ်ချင်း အသိမိတ်ဆွေများ ၄) မိသားစု ၅) အကြံပေးခြင်းမရှိပါ။

ဖြည့်စွက်စာ သောက်သုံးရန် အခြားသူများမှ တိုက်တွန်းဖူးပါသလား။

၁) လူတိုင်းနီးပါးမှ တိုက်တွန်းပါသည် ၂) အများစုမှ တိုက်တွန်းပါသည် ၃) အချို့သူများမှတိုက်တွန်းပါသည် ၄) လူနည်းစုမှ တိုက်တွန်းပါသည် ၅) မတိုက်တွန်းပါ။

မိမိပတ်ပန်းကျင်တွင် ဖြည့်စွက်စာ သောက်သုံးနေသူများရှိပါသလား။ ၁) ရှိပါသည် ၂) မရှိပါ ၃) မသိပါ

ဖြည့်စွက်စာသောက်သုံးခြင်းကို မိမိပတ်ပန်းကျင်ရှိလူများမှ အားပေးပါသလား။ ၁) အလွန်အားပေးပါသည် ၂) အားပေးပါသည် ၃) အသင့်အတင့် ၄) အားမပေးပါ ၅) လုံးပအားမပေးပါ။

မိမိ၏ လက်ရှိကျန်းမာရေး အခြေအနေကို အားရကျေနပ်မှုရှိပါသလား။ ၁)အလွန်အားရကျေနပ်မှုရှိပါသည်၂)အားရကျေနပ်မှုရှိပါသည်၃)အသင့်အတင့်အားရကျေနပ်မှုရှိပါသည် ၄) အားရကျေနပ်မှုမရှိပါ ၅) လုံးပအားရကျေနပ်မှုမရှိပါ။

မိမိ၏ လက်ရှိ ရုပ်ပိုင်းဆိုင်ရာ ကြံ့ခိုင်မှု နှင့် သွင်ပြင်လက္ခကာကို အားရကျေနပ်မှုရှိပါသလား။ ၁)အလွန်အားရကျေနပ်မှုရှိပါသည်၂)အားရကျေနပ်မှုရှိပါသည်၃)အသင့်အတင့်အားရကျေနပ်မှုရှိပါသည် ၄) အားရကျေနပ်မှုမရှိပါ ၅) လုံးပအားရကျေနပ်မှုမရှိပါ။

မိမိ၏ လက်ရှိ စိတ်ခံစားမှုနှင့်ပတ်သက်ပြီး အားရကျေနပ်မှု ရှိပါသလား။ ၁)အလွန်အားရကျေနပ်မှုရှိပါသည်၂)အားရကျေနပ်မှုရှိပါသည်၃)အသင့်အတင့်အားရကျေနပ်မှုရှိပါသည် ၄)အားရကျေနပ်မှုမရှိပါ၅)လုံးပအားရကျေနပ်မှုမရှိပါ။

မိမိ၏ ကျန်းမာရေးအခြေအနေကို အမြဲတမ်း ဂရုစိုက်မိပါသလား။

၁) အလွ လုံးပဂရုမ		ာည် ၂) ဂရု	စိုက်ပါသဥ	ည် ၃) အသ	င့်အတင်သာ	ာ ဂရုစိုဂ	ာ်မိပါသည် -	၄) ဂရုမစိုက်မိဖ	ပါ ၅)
၁) အမြ	ရေးနှင့်ပတ်သ လေ့လာပါသ ါးမလေ့လာဖြ	ာည် ၂) ဒ	— အပြဲတမ်းနီး	းပါးလေ့လာ				သည်။ လေ့လာပါသည်	9)
	းမာရေးစစ်ေ ါသည် ၂) မ၀		ပြသလား	II					
	ာ်အလေးချိန် နိဂရုစိုက်ပါသ						က်ပါ ၅) လ	ုံးဝဂရုမစိုက်ပ <u>ါ</u>	
	ာ် သင်၏ သူလ ခြေအနေအ								
o oo	J	9	9	ඉ	E		ી	6	e
မိမိအတွ	က်ကောင်းမွန်	နဲသည်ဟုဝ	၁င်သည့်အ	ရာများကို(ကိုယ်တိုင်ဆုံး	ဖြတ်ပြီး	အအမြဲလုပ်	ပ်ပါသလား။	
c ©	J 00	9	9		9	G		9	ଚ
ပိုကောင်း	ဘအတိုင်းပြု းသည်ဟု ထ သာအားဖြင့်ဝ	င်မြင်ပါသင	ား။					စားခြင်းက ပိုငေ ပါ	ကင်းသ
	ပ်မိမည် ကို ဖ မကြောက်ပါ	_		ာက်ပါသည်	၃) မကြော	က်ပါ ၄)) လုံးပမငြေ	ကြာက်ပါ	
	ကိုယုံကြည်မှ ာည် ၂) မရှိ		ပါသလား။						

ဆေးဂါးပစ္စည်းများရောဂါဖြစ်ပွားခြင်း(သို့မဟုတ်)ဖျားနာခြင်းများကိုကုသပျောက်ကင်းစေနိုင်သည်ဟုယုံြ ကည် (သို့မဟုတ်) ထင်မြင် ယူဆပါသလား။
၁) အမြဲတမ်းနီးပါး ၂) အများအားဖြင့် ၃) တခါတရံ ၄) လုံးဂနီးပါး ၅) လုံးဂ
ဖော်ပြပါ ဖြည့်စွက်စာကို ဂယ်ယူရန် အလားအလာရှိပါသလား။ ၁) အလွန်အလားအလာရှိပါသည် ၂) အလားအလာရှိပါသည် ၃) ရှိကောင်းရှိပါသည် ၄) အလားအလာမရှိပါ ၅) လုံးဂမရှိပါ
ဖော်ပြပါ ဖြည့်စွက်စာကို ဂယ်ယူရန် စိတ်အားထက်သန်မှုရှိပါသလား။ ၁)အလွန်စိတ်အားထက်သန်ပါသည်၂)စိတ်အားထက်သန်ပါသည်၃)အသင့်အတင့်စိတ်အားထက်သန်ပါ သည် ၄)စိတ်အားထက်သန်မှုမရှိပါ ၅) လုံးဂစိတ်အားထက်သန်မှုမရှိပါ ဖော်ပြပါ ဖြည့်စွက်စာကို ဂယ်ယူသောက်သုံးပါမည်လား။
၁) အမှန်တကယ်ဂယ်ယူပါမည် ၂) ဂယ်ယူပါမည်။ ၃) ဂယ်ယူကောင်းဂယ်ယူပါမည် ၄) မဂယ်ယူလိုပါ ၅) လုံးဂမဂယ်ပါ
အသက်
၁၈-၂၉ ၃ဂ-၃၉ ၄ဂ-၄၉ ၅ဂ-၅၉ ၆ဂ နှင့် အထက်
ကျား/ မ
ကျား မ
ယခုလက်ရှိသောက်သုံးနေသော ဖြည့်စွက်စာများကိုဖော်ပြပါ။
၁)
J)
5)
9)
9)
ဖြည့်စွက်စာသောက်သုံးနေသည်မှာ မည်မျှကြာပြီနည်း။
၁) ခြောက်လအောက်

- ၂) တစ်နှစ်
- ၃) တစ်နှစ်အထက်

အောက်ပါရောဂါလက္ခကာများ ခံစားနေရပါသလား။

- ၁) သွေးတိုး
- ၂) ဆီးချို
- ၃) အဆစ်အမြစ် (ဂေါက်) ရောဂါ
- ၄) နလုံးနင့်ပတ်သက်သောရောဂါများ
- ၅) အစာအိမ်နှင့်အူလမ်းကြောင်းဆိုင်ရာ ရောဂါများ
- ၆) အခြားရောဂါများ
- ၇) ရောဂါမရှိပါ