### **Original Article**

### Factors Influencing Consumers' Attitude Towards Online Buying of Dietary Supplements: A Study on Consumers at LifePlus Store in Mandalay

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**Background**: With technological advancements, the internet has transformed people's lives worldwide. Marketing has been boosted by the creation of online virtual stores. Customers can buy products and services from anywhere in the world, 24 hours a day, 7 days a week, without geographical or temporal constraints.

**Objective**: Although many advertisers realize the power of the Internet, few research studies have been written on the characteristics that drive Mandalay customers to buy dietary supplements online. The aim of this study is to examine the influencing factors of customer attitude towards online purchasing of dietary supplements in Mandalay.

**Materials and Methods**: Data was collected from 'LifePlus' pharmacy, health, and beauty store OTC (over the counter medicine) customers using a self-administered pre-structured questionnaire. The collected data was examined using a quantitative approach descriptive-analytical design. The survey is based on 309 respondents who were willing to participate.

**Results**: According to the findings of the survey, customers' attitudes toward online buying for dietary supplements are influenced by perceived benefits (convenience, time savings, trust, and comparison). The results of the study indicate that factors such as time saving, and trust influence the consumers' attitudes towards online shopping. Furthermore, there is a positive effect on consumers' attitudes towards online shopping of dietary supplements.

**Conclusion**: This study strongly recommends online marketers to enhance timely delivery and trust with online shoppers to increase sales of their product or service other than dietary supplements.

**Keywords:** consumer attitude; dietary supplements; security; time saving, trust.

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#### INTRODUCTION

E-commerce sales growth is unstoppable and for good reason, hence online shopping is one of the most popular online activities [1]. Global e-commerce sales are expected to increase 26.7% year-on-year to reach \$4.891 trillion in 2019 [2]. Because Myanmar is also rapidly developing, domestic and foreign telecom companies have distributed low-cost Internet SIM cards to the public, thanks to advancements in internet and mobile technology. As the prices of SIM cards decrease with the Internet, people are getting more connected. Moreover, the spread of the Internet is increasing rapidly and accountable for the development of new sectors in our countries' economy. Among them, online shopping has been one of the significant changes in the economies of nations.

Since 2013, the trend of online shopping in Myanmar is developing day by day and the volume of trade is clearly increasing. An alternative shopping channel has become more convenient and useful than the traditional shopping style. Moreover, it is attracting more and more people to trade more and more products and services online. With the rise of online sellers, the competition between offline and online is also becoming more intense.

Studying consumer helps in obtaining clues to improve or offer goods or services, set prices, create channels, formulate messages, and develop various marketing and advertising things to do [3]. As an alternative way to purchase merchandise, online shopping is becoming more popular and imperative among people who want to stay away from the hassles of traffic and busy roads. Traditionally, to buy whatever consumers want, they must visit the stores.

The distinguishing characteristics between online shopping and traditional shopping are that consumers do not need to go out to buy something, but instead they can determine their choices of goods or services by comparing the items presented on the websites. These attitudes have led to influencing factors that can influence consumer buying behavior [4].

Data from Slice Intelligence shows that the vitamin and supplement category is growing rapidly, with sales increasing 40 percent in 2015. Purchases of vitamins and nutritional supplements online are increasing at such a rapid rate that the category is moving 12 percent faster than the average e-commerce itself. While the vitamin and supplement sector are large online, there is obviously room for brick-and-mortar retailers who dominate offline category sales to better capitalize on

the e-commerce opportunity, which is clearly stealing supplement market share.

Sales of vitamins and nutritional supplements are so large on the Internet that the revenue generated from these products is almost equal to all the money accrued from purchasing wearables in the last 12 months. The majority of vitamin and supplement purchases are made through Amazon, the Seattle retailer, which accounts for 77 percent of all vitamin and supplement sales made online [5].

The dietary supplements include multivitamins, minerals, traditional or herbal ingredients, amino acid substances such as collagen, which is widely used among adult males and females. Dietary supplements revenues rose from \$8.8 billion in 1994 to \$18.7 billion in 2002, as the use of nutritional supplements has played an important role in American health culture over the past decade. Annual sales of dietary supplements are projected to be close to \$20 billion in 2004 and control half of the market [6].

The attitudes of consumers towards online shopping will decide the enticing variables motivating consumers to buy online, and these variables will help marketers devise their internet marketing strategies, respectively. Since our field of research will be on customers of the 'LifePlus' store and specifically in Mandalay, our research study will be helpful to marketers in general and will particularly be beneficial to Mandalay marketers.

This research would also investigate how the demographics and personal characteristics of customers influence their attitudes towards purchasing supplements online.

### **MATERIALS AND METHODS**

## Study Design, study population and study period

Using a quantitative approach descriptive-analytical design, a structured questionnaire is used to collect data for this study. Participants were recruited using simple random sampling and convenience sampling because selection is based on participants' availability and desire to participate. Over the counter (OTC) pharmacy, health, and beauty store 'LifePlus' consumers will be asked if they would like to participate in this survey and the goal of the study will be explained, as it will take roughly 10 to 15 minutes to complete the questionnaire. Customers who agree to participate in this survey will be given a pre-structured, self-administered questionnaire.

This study was designed to survey 'LifePlus' pharmacy, health, and beauty store customers using socio-demographic characteristics, dietary supplements

purchasing intent, convenience, time savings, trust, and selection freedom to determine the customer attitude toward online dietary supplements purchasing.

The sample size calculated is 400. In anticipation of a non-response percentage, questionnaires were delivered to 410 respondents for this study.

### **Data collection**

After gaining approval from authorities in the 'LifePlus' pharmacy, health and beauty store management, qualified clients of over-the-counter medications will be selected for a paper-and-pencil survey. Adults older than 16 were chosen as participants.

Two sections comprised the Questionnaire. The first section of the survey requested demographic information from respondents, including their gender, age, income, level of education, and year of Internet access. The second section compares online shopping's Convenience, Time-Savings, Trustworthiness, and Online Attitude towards Dietary Supplements Purchasing. Because participants are chosen based on their availability and willingness to participate, the convenience sampling approach is utilized.

The questionnaire produces 400 responses evaluated on a 5-point Likert scale: (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Disagree nor Agree, 4 = Agree, 5 = Strongly Agree) [7]. The Questionnaire can be completed in around 10 minutes. There are 34 items testing attitudes regarding purchasing nutritional supplements online.

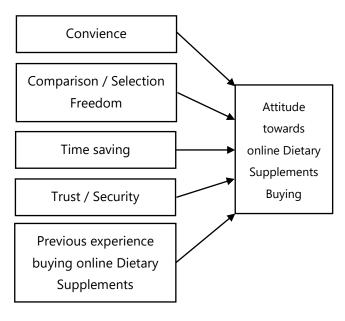


Figure 1. Conceptual framework of the study

### **Conceptual Model and Variables**

The conceptual framework of this study is extracted from previous empirical studies [7-9]. Based on the theoretical framework, the sample conceptual framework could be constructed (see figure 1).

### Data analysis

A descriptive analysis was conducted using the frequencies and percentages of the categorical variables to describe the overall characteristics of the study participants. We used correlation analysis, as well as single and multiple linear regression analyses, to assess the impact of the factors influencing consumers' attitudes on purchasing dietary supplements online. SPSS version 25 was used to analyze the data. All tests were two-sided, and a p-value less than 0.05 was regarded as statistically significant.

#### **RESULTS**

**Table 1**. Sociodemographic characteristics of participants

Characteristics (n=400)	No.	Percentage
Gender		
Male	191	47.75
Female	209	52.25
Age group (years)		
18 – 25 years	66	16.50
26 – 35 years	169	42.30
36 – 45 years	88	22.00
46 – 55 years	51	12.80
55 and above	26	6.50
Education		
Less than high school	73	18.25
Complete high school	76	19.00
Complete college/university degree	191	47.75
Complete postgraduate degree	60	15.00
Current salary (Kyats)		
Less than 300,000	133	33.25
300,001 – 500,000	99	24.75
500,001 – 1,000,000	116	29.00
More than 1,000,000	52	13.00
Ever bought online		
Yes	309	77.25
No	91	22.75

**Table 2**. Descriptive statistics for the likert-scale questionnaire of convenience, time saving, comparison, trust, previous buying experience and attitude

Items	Mean	SD
Convenience		
Convenience is my main reason for shopping online	3.85	0.87
If I shop online, I do not need to go to a shop	3.54	0.64
It is more convenient to shop through the Internet than the traditional retail shopping	3.54	0.64
If I shop online, I can shop in privacy of home	3.77	0.58
If I shop online, I can save myself from market crowd	4.00	0.79
If I shop online, there is no embarrassment if I do not buy	3.62	0.63
Time saving		
Online shopping takes less time to purchase.	4.08	0.73
If I buy goods or services via online because it saves time	4.00	0.68
I do not like to spend much time on shopping.	3.69	0.61
If I shop online, I can take as much time as I want to decide	4.08	0.73
If I shop online, I can save myself from chaos of traffic	4.00	0.68
Comparison / Selection freedom		
It is easy to choose and make comparison with other items/services while shopping online	3.84	0.77
Selection of goods/services available on the Internet is very broad	4.23	0.80
Online sites help to compare various brands	4.15	0.77
If I shop online, I can get detailed product information online	4.23	0.80
If I shop online, I can easily compare price through different online shopping sites	4.15	0.77
If I shop online, I can compare the same product on different online shops	4.15	0.77
It is easy to choose and make comparison with other items/services while shopping online	3.84	0.77
Selection of goods / services available on the Internet is very broad	4.23	0.80
Trust / Security		
I feel secure to purchase things via online	3.40	1.13
I feel that online shopping sites have adequate security features	4.00	0.95
I trust that I will get exactly what I ordered through online shopping	3.41	1.12
I feel that online transaction is safe and secure	3.61	0.91
The detailed product information mentioned on the online shopping sites is trustworthy	3.70	0.90
I feel secure to purchase things via online	3.40	1.13
Previous Online Buying Experience		
If you need any health foods within the next 12 months, do you plan to make your purchase online from the	3.83	1.03
Will you recommend your friends to buy health foods online from the Internet?	4.13	0.80
To improve health, and prevent disease	3.38	1.15
To beautifying skin	4.00	0.96
To improve brain	3.38	1.15
To buy for others	3.77	0.84
Attitude		
Shopping online is fun and enjoyable.	3.84	1.02
Online shopping makes my shopping easy.	3.68	0.90
I find that online shopping is compatible with my lifestyle	3.92	0.95
I like to shop via online	3.77	0.84
I think online shopping is useful for me.	3.81	0.88

## Socio-demographic characteristics of respondents

Regarding gender, the distribution of respondents is well balanced, 47.75 percent of the total of 400 responders are male, while 52.25 percent are female. Most respondents are between 26 and 35 years old, while many respondents are between 26 and 35 years old. Also, younger persons may purchase online more frequently than older individuals. Many responders (47.8 percent) hold university degrees, followed by 19 percent with a high school diploma. The respondents' income in the range of 100,000 to 300,000 Kyats was the highest. This may be because most students who study on campus fall under this income range. They were next followed by those with incomes between 500,001 and 1,000,000 Kyats. Out of 400 respondents, 309 (77.25%) have previously shopped online, while only 91 have never done so (see Table 1) for the following reasons: (1) they wish to physically inspect the merchandise was the most prevalent reason with 10.5%, followed by (2) concern about fraud and (3) unfamiliarity with the online purchasing process at 4.3%, (4) 2% said online shopping is time consuming, and (5) not being familiar with the online purchase method at 1.8%.

## Assessment of attitude towards online shopping of dietary supplements

The respondents' mean values for the attitude indicated that they agreed with the statements. The overall mean value of the respondents' attitudes about internet purchasing is favorable (3.80). People believe that shopping online simplifies their shopping experience. They also appreciate online shopping and believe that it provides them with many benefits. Moreover, they consider online buying fit with their lifestyle.

### Assessment of convenience factors on attitude

The overall mean (3.72) indicates that consumers have a favorable view of the convenience of online buying. The respondents agreed with all convenience factor statements with mean values greater than 3. People among them were more concerned with avoiding market crowds and sought to avoid the crowdedness of internet buying. A busy lifestyle, severe weather, and commuting on vast traffic routes are compelling consumers to believe that shopping is unnecessary. They enjoy internet shopping since they do not have to worry if they decide not to buy the item.

### Assessment of time saving factors on attitude

Time savings is another aspect that influences consumers' attitudes towards internet shopping. Saving time is essential in all parts of life, including shopping. Online purchasing requires significantly less time than traditional shopping. Therefore, an increasing number of Mandalay residents prefer internet purchasing to traditional buying. The respondents agreed, with a mean score of 3.99, that time is a significant and influential element in their attitudes regarding online buying. Consumers do not wish to spend time in stores purchasing goods. People in Mandalay are becoming increasingly dissatisfied with traffic congestion and scorching heat, so they don't want to waste time going shopping. Therefore, people prefer to purchase online since they believe it allows them to avoid the turmoil of heavy traffic and the oppressive heat outside.

### Assessment of comparison/selection freedom factors on attitude

The ability to select, compare, and contrast products and services is one of the most important aspects of online buying. It provides consumers with the ability to select and compare brands or goods while buying online. Six statements with Likert Scale questions were posed and examined to determine the influence of this element on internet shopping. The mean values for these statements are provided in the table (2).

The overall mean value is 4.13, indicating that the selection flexibility factor influences consumers' attitudes toward online purchasing. Consumers are always interested in comparing products across stores. They have the freedom to choose, compare, and compare the products and services they intend to acquire when they shop online. This is the primary reason Mandalay customers prefer to shop online.

### Assessment of trust/security factors on attitude

Trust is a sensitive issue that most online shoppers are concerned about. Most of the online shoppers' dislike taking risks, which might have a negative impact on consumers' perceptions of online buying. The mean values of five statements including Likert Scale questions were examined and displayed in the table (2).

This element's total mean value is also 3.62, indicating that the trust factor influences customers' opinions regarding online buying. Most consumers believe that internet buying is the most susceptible to technological deception. They refused to agree on the dependability of their internet shopping because most of them did not feel safe purchasing items online.

# Regression analysis of factors predicting attitude towards online buying of dietary supplements

**Table 3**. Regression analysis summary for all factors predicting attitude towards online buying

Predictors	b	SE	t	р
(constant)	0.256	0.183	1.397	0.163
Convenience	0.362	0.103	3.158	0.002*
Time saving	0.566	0.105	5.379	<0.001*
Comparison	0.292	0.100	2.902	0.004*
Trust	0.591	0.077	7.678	<0.001*
Previous experience	0.217	0.093	2.330	0.020*

<sup>\*\*</sup> Significant at the 0.05 level (2-tailed).

A multiple linear regression was calculated to predict attitude based on convenience, time saving, comparison, trust and previous online buying experience (see Table 3). A significant regression equation was found (F(5, 308) = 22.343, p < 0.001), with an adjusted R<sup>2</sup> of 0.457. Participants' predicted attitude is equal to 0.256 + 0.362 convenience + 0.566 time saving + 0.292 comparison + 0.591 trust + 0.217 previous experience. The adjusted Rsquared is 0.457, indicating that all factors could jointly explain 45.7 percent of the variation in consumers' attitude. That mean all factors are making a significant contribution to the prediction of attitude towards online buying of dietary supplements. Moreover, the beta coefficient value of the trust factor is (beta=0.591, t=7.678, p<0.001), which is the highest value that has the most impact on the online purchasing behavior of customers. In addition, time savings and convenience rank second and third, respectively, among the variables influencing the online purchasing attitude of LifePlus store customers in Mandalay.

#### **DISCUSSION**

A descriptive-analytical study was conducted at Over the counter (OTC) pharmacy, health, and beauty store 'LifePlus' consumers to investigate the factors influencing consumers' attitude towards online buying of dietary supplements. This survey included 400 LifePlus customers in total. The factors (i.e., convenience, time saving, comparison/selection freedom, trust/security, previous buying experiences) were investigated on attitude towards online buying using regression analysis. We concluded, based on the data, that trust is the most

important and attractive element among five factors, because safety concerns are crucial following time savings, the second most influential factor, followed by the convenience of online shopping, which is also significant.

Trustworthiness is a crucial element in online shopping. It has been discovered that suspicion exists regarding the security characteristics of online buying websites. Also relevant is the quality of the things they ordered via internet shopping. Most consumers believe that online purchasing is the form of shopping where they are most likely to be misled by technology [10]. Thus, consumers' attitudes toward online purchasing are substantially influenced by their trust in online sellers. The study indicated that internet shoppers are concerned about the trust issue, among other factors. Therefore, businesses should utilize a high-security system that allows for more secure website transactions [11]. Moreover, to build consumer confidence, businesses must improve their brand reputation, as corporate reputation is tied to the quality of services offered. In addition, businesses must provide shoppers with some assurance that they can trust their products and services. For instance, corporations are required to offer a money-back guarantee on their items if consumers are dissatisfied with the products or services they get [12]. It demonstrated that the corporation cares about its clients, which will boost consumers' trust in the company. Concurrently, marketers should engage in trust-building activities such as posting a privacy statement, communicating in real-time with customers, promoting their good reputation, and referring to other trusted websites.

In terms of time savings, people believe online buying is more efficient than traditional shopping. People in Mandalay do not wish to spend a great deal of time shopping. In addition, online buying is flexible, allowing consumers to shop whenever and wherever they choose. There is a relationship between the importance of time savings to online shoppers and their attitudes towards online buying. Companies that offer online product or service counseling, product reviews, and quick delivery will be advantageous for shoppers who lack sufficient time to complete these transactions [11].

People in Mandalay are becoming increasingly interested in escaping the chaos of the market crowd, as well as the heavy traffic and hot temperatures on the roadways. They believe that online purchasing is more convenient than traditional shopping in this regard [13]. In addition, people prefer internet buying because they believe they can protect their privacy. In addition, online

shopping is appealing to them because there is no need for concern and no shame if they choose not to purchase the things.

According to the survey results, comparison is one of the most influential factors on customers' attitudes toward online shopping. It gives a variety of resources for individuals to compare the products they wish to acquire. It is possible to compare not only the price but also the comprehensive specs of the product [12]. In addition, this analysis revealed that selection freedom is a motivating element.

This study explored the elements that influence a customer's attitude regarding purchasing dietary supplements online. It is prudent to concentrate on a single topic at a time. However, the complexity of internet technology indicates that academics will need to continue studying this topic to stay up with the latest advancements [14]. Each year, new IT characteristics and capabilities are introduced, necessitating that users likewise update their systems and infrastructure.

### **CONCLUSION**

Online shopping is growing increasingly popular among customers in Mandalay. Understanding the needs of online shoppers has become a problem for advertisers. Understanding the attitude of customers regarding online buying, strengthening the elements that encourage customers to shop online, and concentrating on the factors that inspire customers to shop online will aid marketers in gaining a competitive advantage. Therefore, to boost the volume of online sales in Mandalay, it is essential to understand the attitudes and intentions of the locals.

In conclusion, providing customers in Mandalay with the confidence to shop online and the comfort to use while shopping online has a direct positive effect on their attitude toward online shopping. This indicates that a more favorable attitude about internet shopping will increase purchasing intent. Therefore, marketers should strive to raise consumers' positive attitudes to increase their intent to purchase, which will increase the sales of digital items.

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**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki and approved by the Ethics Committee of YEC Learning Center, Mandalay, Myanmar in MBA Course which is affiliated with Lincoln University College, Malaysia.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study as well as to publish this paper.

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