The Relationship Between Marketing Mix and Consumer Preference in Supplement Product Usage

Yaty Sulaiman¹, Maisarah Masri¹, Maha Mohammed Yus¹, Mohd Yusri Shahril Ismail², Saed Adnan Mustafa³ and Nooraini Salim⁴

¹School of Business Management, College of Business, Universiti Utara Malaysia, Kedah, Malaysia
²Quality Assurance & Product Development, Southern Pipe Industry (M) Sdn Bhd, 4457, Mk 15, Jalan Chain Ferry, 72100 Butterworth, Pulau Pinang, Malaysia
³Business Administration Department, SUR University College, Oman
⁴Department of Educational Foundation and Social Science, Faculty of Education, Universiti Teknologi Malaysia, Johor, Malaysia
*Corresponding Author: yaty@uum.edu.my

Abstract: Nowadays, we can see the entrepreneurs of supplements and cosmetics are also expanding rapidly. Supplement product marketing activities in Malaysia showed significant growth over the past few decades. Based on the Euromonitor, (2015) Gross Domestic Product (GDP) of the health of consumers in Malaysia are experiencing a slow reduction of 5% in 2015 compared to 2014 by 6%. This strong growth has led to questions about the true potential of marketing to further improve the reliability of the product on the consumer preferences of supplements among university students.

INTRODUCTION

There are a lot of successes have been achieved by Malaysia and received recognition from the international community, particularly in the economic sector. With the advancement of technology today, Malaysia's economic progress can be further extended to various sectors such as the services sector in Malaysia. Malaysia market's ability to compete with the overseas market in view of the serious need for various initiatives has been undertaken by the government in Malaysia as a country not only able to compete at the international level but even produce a healthy and productive citizen towards ensuring accelerated development of the country. A healthy lifestyle is very important in life to face the days ahead. The World Health Organization (WHO, 1948) defines health as a state of physical, mental and social well-being and freedom from disease. This definitely confirms that the three aspects are important in living a healthy and prosperous. Improved health product industry, we can see today it become popular among the public in
The emergence of various types of products gives users the option to choose a product that meets their tastes and needs. Therefore, taking a supplement that has become a trend to the extent that people affected indirectly because it is said to appear in all kinds of products that supposedly able to cure chronic diseases. Users need to be wise in making the choice to understand the holistic supplement products, namely, whether through its own studies or reading about something related products.

Based on the Euromonitor, (2015) Gross Domestic Product (GDP) of the health of consumers in Malaysia are experiencing a slow reduction of 5% in 2015 compared to 2014 by 6%. In the OTC (over-the-counter) products will cause an alert expense through slower economic growth especially when the cost effective and lead to more price sensitive consumers when purchasing health products.

In Malaysia, companies like Amway and Herbalife products are health companies direct selling high-end consumers who benefit from greater confidence in the quality of their products as long in the market. In 2014 the product segmentation and analysis of the health food market share of 49% and is expected to lead the market by the end of 2019. In fact, the consumer also has misgivings when buying consumer health products OTC medicines. Demand for vitamins and supplements will remain strong as consumers consider to be important to maintain good health and reduce the risk of chronic disease. Economic growth in Malaysia to raise awareness to the residents concerned with their needs and requirements in their buying habits that can respond to change the deciding factor when buying decision. Although the decision is relatively easy to see and measure, or psycho physiological process is very difficult to take into account. Thus, the consumer flavor characteristics indicate that specific studies need to be considered in this study.

University life is an overflow challenging, especially for students who are far from where they live with their parents and families where different environment for them. Unfamiliar environment affects personality, attitude and behaviour, particularly on their food choices that influence by their nutritional status. According to Isa & Masuri, (2011) the dietary pattern of young adults has been extensively studied and reported in the literature as associated with obesity, frequent snacks, and skipping meals.

Through the nutritional status of students in the university, sometimes they can make choices that do not fit through a survey (Cruz, 2000; Isa & Masuri, 2011). Furthermore, the observation of researchers previously noted that the daily routine of students such a busy schedule of classes, peer pressure because students tend to change their eating habits. Further, because the food in the hostel provided almost the same cause students tend to take the same food over and over and less diversity of substances in food eaten (Cruz, 2000; Isa & Masuri, 2011).

Nutrition for boys and girls are different. Some females have reported skipping meals to achieve and maintain the desired body size. Thus, the impact is not good to their eating routine (Manwa, 2013). Therefore, it is very important to investigate their eating patterns, assess their nutritional status and dietary patterns affect the nutritional status of the student. To view the long-term effects in their daily life at the university, food intake affects the health effects of their mental and physical force through can see better academic performance (Manwa, 2013).

Based on the fact Hughes (2010), the desire to consume products that are practical and can meet the needs of supplement products that demand for food is increasing. However, the use of supplements
should be used carefully so as not to harm things like poisoning. So, by researching information about a product before making a decision to buy it seem that for knowledge and can be focused on the major health determinant (Hughes 2010). Busy with everyday tasks to prevent the students to pick up food for a balanced result in consumers taking vitamin or mineral supplements to replace the lack of nutrients in their daily lives.

This is because, according to Isa & Masuri, (2011) most of the students who study in the city to take supplements on factors such as air pollution, work pressure as well as pesticide contamination around. Nowadays, the quality of the food is also not what it used where the chemicals used in food is high in comparison with the past. For example, fast food all the rage, especially youth and children as a cheap and affordable price. According to the State of Food and Agriculture (SOFA, 2013) showed that 12.5 percent or 868 million people in the world face the problem of malnutrition. Even more so when the majority of whom are children and 70 per cent are children in Africa.

From SOFA (2013), report proves the child also has the potential for a lack of nutrients and substances as experienced by adults. Strategies to improve household food security in Malaysia’s National Nutrition Action Plan (NPANM) as stated by the Minister of Agriculture and Agro-Based Industry, Dato ‘Sri Ismail Sabri bin Yaakob shows that the issue of food security and nutrition in the country cannot take lightly. According Yetley (2007), supplement the security issues such as bio-availability (bioavailability), bio-equivalence (bioequivalence) and confirmation in vitro and animal studies it is appropriate to reflect the limited human condition. When used in supplements may involve exposure to excessive nutrients or chemicals to normal individual need.

This is because, potentially beneficial supplement product or harm to the user interaction (ADA, 2015). People now believe that lifestyle and poor diet pattern require them to seek the help of nutritional supplement products to meet the needs of the body. It is also a way to maintain health. However, many argue that taking supplements is said to restore and enhance the prevention of illness while getting advice from a qualified doctor. However, according to Ghazali (2016), supplements are not always healthy for the body and always have side effects that need to be taken into account. Therefore, nutritional supplements are taken in every important for us to know and is very important for us to ensure that they comply with the standards of supplements Recommended Nutrient Intake (RNI), Malaysia, 2005 and received approval from the Ministry of Health (MOH).

**Consumer Preferences**

Feelings of excitement, frustration as a result of the comparison of products viewed through performance or results in relation to the expectations of some of the researchers who define preferences (Singh and Agarwal, 2012), Verma and Khandelwal, 2011; Brand and Leonard, 2001), store attributes (Bianchi 2009), (Saaty, 1980; Subbaiah, 2011), (Liisa 1990; Mitchell and chiral 1998; Arora,1999; Franklin, 2001; Liu - Hai, 2005; Philippidis and Hubbard, 2003; Tzeng et al., 2002). Most companies look to satisfy the high impact when purchasing a product that satisfied users are giving a reduction in the concept of priority where users can see the change when a better offer comes along. Meanwhile, for those who are very satisfied are they less likely to change because of the inherent satisfaction and pleasure or joy through the emotional bond with the brand even rational priorities.
The key to getting high consumer loyalty is to deliver consumer value which can benefit the company. A major competitive value will not be easily changed through the production. Furthermore, for certain brand products, it is one of the promises of the user so that the user can expect the product to be used as their choice. Moreover, the priority can be triggered by the characteristics of the materials related to the significant items in the shape, size, printing, taste, color, consistency, packaging and many more.

Supplements

There are many supplements on the markets; a good product will regulate the product from the beginning until the end. So as the best producer of food supplements will be issued and distributed in the market if companies comply with FDA (Food and Drug Administrator) and GMP (Good Manufacturing Practice) procedures.

The procedures FDA (Food and Drug Administrator) and GMP (Good Manufacturing Practice) is a compulsory subject in the selection of supplements. According to Wuri, (2007) supplements are additional products that are used to supplement food containing one or more ingredients such as vitamins, minerals, or substances derived from plants, amino acids or material to improve Dietary Allowances (RDA), or concentration, extract or a combination of the above materials. Thus, many users take supplements is to fill a need within the lack of nutrients or vitamins.

This definition was agreed by Geoffrey P. Webb (2006) which states that food supplements constitute a pattern for a normal diet and help health by taking important nutrients such as vitamins, macro minerals, trace minerals and others. It is as busy and do not have time to keep the body healthy. While according to the Dietary Supplement Health and Education (DSHEA) of 1994 defines supplements as products other than tobacco are expected to complete food containing one or more of the food ingredients such as vitamins, minerals, herbs, amino acids, the feed to increase nutritional concentrate, substance metabolite, extract, or combinations of these ingredients.

However, according to Devla, R. Acharya, S. Acharya and Kumar, (2011) each country has a different call to the term of supplement. For example, Health Food (China), Health Food Supplement (Korea), Dietary Supplement (United States), Nutraceutical (Canada). Even though, the average Australian used the term complementary product while the Food Supplements (Hardinsyah and Aries M, 2012) practiced in Indonesia. The term does not distinguish the various internal functions supplement itself generally help users improve the health of the body.

In addition, according to the Food and Drug Administration (FDA) stating that the supplements consist of a variety of forms, including tablets, capsules, powders, energy bars and liquid. Ghazali, Mutum and Lee (2006) argues pleased to supplement available from pharmacies, health shops, clinics, Chinese medicine shops, supermarkets or from agents selling directly to customers. It is not directly encouraging the purchase and use of supplement products because of its simplicity to be found by users. Moreover, now, up to date technology at their fingertips, where the widespread use of technology allows various products or items purchased on-line.

The Concept of Marketing Mix

The concept of marketing mix is an activity that can be done by companies to influence the demand for and supply of a product either products or services. Thus, McCarthy has inspired the concept of the
marketing mix, known as the “4Ps” of the product, price, promotion and place. The concept is popular among marketers to identify shortcomings and strengths of the factors existing in the marketed product.

The objective of the marketing mix is continuing to perform actions that affect consumer purchasing decisions (Megan J. and Han F. 2012) and the role of the market itself is to align supply and demand in the market. Similarly, Kotler and Keller (2012) defines marketing as a social process that helps the flow of products and services in an economy from the producer to the consumer and at the same time to be able to meet consumer demand and enhance the organization’s goals.

Peter and Donnelly (2007) in Mohammad, Wang and Sumayya (2012) states, each element in the marketing mix affect users in different ways. It is thus important to ensure the right product is placed in the right place, at the right price and at the right time. Similarly, multinational companies, they need to know how to adjust your marketing strategy and how they are to adjust elements of the marketing mix in the market for universal (Vrontis and Thrassou (2009). They need to know the need to adapt the product, price, promotion and location to take into account all the variables of marketing mix (Kotler and Keller, 2009). However, the marketed product will fail if one element in the marketing mix cannot be reached indirectly will affect the profitability and performance of the company that produces the product.

Product

According to Kotler and Keller (2011), this product is something that can be offered to a market for attention, owned and worn or taken to meet the needs or the needs of consumer. Consumer will find the products that suit their own for self-satisfaction. Furthermore, many aspects and elements of the product should be considered before making a decision to buy any product. And, as noted by Alvaro. G. M, Oscar. G. B, and Mercedes. M. P (2016), the physical form of the product, product packaging and labeling information can influence consumers to come to the store. Whereas according to Kotler and Armstrong (2008), the factors to be taken into account by the manufacturer before producing product includes diversification of products, product design, product features, product brands, product size, packaging, services and warranties after product purchase,

According Linnerman et al, 1999 stated that the growing demand through health food products by making an educated consumer is a more challenging and makes it more flexible and can be distinguished by certain features. In fact, not only that, as their users want quality products that provide special benefits in terms of health and safety, and ensure the quality of the environment (Van der Heuvel et al., 2007). Several studies have been conducted to examine how consumers evaluate the properties of different products in many food products include health, nutrition, taste, price, facilities are some of the criteria used to determine the product more attractive (Bech-Larsen et al., 1999). Consumer can put the balance in their food choices, for example between nutrition and price, nutrition and facilities (Blaylock et al., 1999).

Packaging is the visual appeal of food products is a strong influence on consumer acceptance (Tuorila and Pangborn, 1988; Cardello, 1994). In fact, the properties of the packaging also can persuade consumers to buy a product, and sensory will confirm if they like. This can give you the desire and determination to users and will repeat purchases (Munray and Delahunty, 2000). Package and label only has to make an impression on the minds of consumers (Dantas et al., 2004) at the time, he must draw the consumer attention, and convince buyers that it is the optimal choice on the shelf (Rowan, 2000).
Next, through color and graphics represent the key elements in the design of the package. Deliza (2003) suggested that the package designer should take sensory properties of this product when designing labels. In order to achieve the needs of users and successful in the market, manufacturers need to try to understand the sensory characteristics and packaging of food products (Munray and Delahunty, 2000). Consumer usually do not choose one of the features that at one time, instead they chose a bunch of features that make them the best utility in the product selection process.

Some literature has been devoted to the perception of consumers in the labeling and packaging, and the role of information on consumer intentions to buy. For example, in Roe, Levy and Derby (1999) study, nutrition and health claims set out in next label is more important than back-nutrition facts label. Bond, Thilmany and Keeling (2007), recognizing that the health benefits of a diet rich in fruits and vegetables, and the power of these products reduce the risk of coronary disease and cancer, a claim proved most effective when attracting consumer.

**Price**

Price is the amount of money given the consumer is willing to pay and remove it to a product or service. In setting prices, companies must estimate the reaction of customers to estimate the price of better profit margins and possible discounts in the future.

Companies need to be aware of the legal restrictions on price. The price is the amount charged for the product. Factors maintaining the purchase, depending on the purchase directly influenced by the price of the product.

Generally, all grades given by customers to benefit from owning or using a product. According Tjiptono (2008), the price is a marketing aspect which is flexible in where it can be changed quickly. According to the researchers (Johnson and Gustafsson, 2000; Morgan, 1996; Zeithaml and Bitner, 1996; Hill, 1996; Dutka, 1995, and Giel Naumann, 1995), said the price is a factor influencing customer satisfaction. However, users also use price as a gauge to see the quality of a product. For those who want more expensive product quality and reliability. Similarly (Hawkins, Best, and Coney, 2001: Schiffman and Kanuk, 2010) stated price is a service to the quality of the signal. Depending on the product, consumers prefer to buy products at a cheaper price with the quality and the criteria that they need. In this case, employers should be more sensitive products because of the competition, competitors will lower prices cheaper than what is sold by the producers. Lupiyoadi (2001) say that the pricing is very significant in providing value to the consumer in making and influencing decisions.

According Wathieu and Bertini (2007), there is evidence to suggest that the higher price of the product, believed the higher the quality of a product. There are also a handful of marketers who produce misleading information related to the user. For example, the label on the supplement products, halal label, expiry date, or the price tag on the shelf.

Product purchase decisions are not solely dependence on the product, but the price factor also plays a role in influencing consumer decisions. Product price must be appropriate to the materials used in the manufacturing process of the product. Therefore, users need to check information or label before purchasing to ensure that products sold on the basis of a reasonable price for the materials used. The other alternative for marketers such as discounts or special prices only to increase the desire of buyers to buy a product and products that get discount can change the minds of consumers where previously about to buy because the
price is very expensive. This proves the price of a product has the potential to change consumer purchasing decisions on a product.

Moreover, when we talk about the student’s budget regarding about buying the supplement between their food, textbooks and tuition and money can a bit tight when it comes to college. According to Goldstein, 2015 he mentions a few tips to buy supplement such as buying what need, buying in bulk, and get a membership plus they can give the special offer and also the coupons for the best deal.

**Place**

Place is the third marketing mix element refers to have the right product to the right location at the right time to purchase by the consumer. The proper placement of through middlemen known as a distribution outlet. Distribution channels consist of overheads interdependent with each other, namely, wholesalers and retailers. In fact, he was involved with a product or service available for use or consumption of the product concerned. Jones (2007) defines it as any way in which consumers can get the products or services. Location factors also play a role in influencing consumer purchasing decisions in buying a product. It is important to ensure the functioning of product distribution channels to deliver products to target consumers. Among the criteria for the location of choice among consumers and is close to them go. Accordingly, the selection of appropriate locations needs to employers because a wrong decision can lead to failure in business. A good location can guarantee the arrival and attract many users to change the shopping patterns and purchase (Tjiptono, 2000).

Therefore, it is important for marketers to ensure the products made and distributed it easy for users to get it. Put the product in the right place and at the right time is necessary because when people come to the store to buy the product, the product can be obtained without problems such as out of stock. If not, they certainly will be elsewhere that supply the same product at the same time causing marketers to lose customers. The marketing of products is important because generally people tend to business location to location and facilities available and give satisfaction to the users. According to a study made by Chung and Lee (2003), the position of the image or place is an important factor in the marketing mix affects purchasing supplement products. The choice of location was good to have a positive effect in raising supplement product. According Anntha Raj (2012), an efficient distribution channel can help producers, manufacturers and users in carrying out the tasks of distribution.

According to previous results (Patterson, 1999; Loureiro and Hine, 2001; Brown, 2003), marketing locally grown products should stress quality, freshness and price competitiveness. Although, Kotler and Armstrong (2006), defining the place or distribution as a set of interdependent organizations involved in the process of making the product available for use or consumption by the user. Calling a strategy for effective distribution of products is through the marketing channels such as wholesalers or retailers (Berman, 1996). According to a survey conducted by Chung and Lee (2003), the position of the image or place is an important factor in the marketing mix affects the purchase of products.

Strategy places in grocery stores, including assess the health product availability in stores this (Kotler, 2013). Shops may place or reposition products by putting the products in the store. The dimensions of the channel, coverage, range, location, inventory, and transportation (Borden, 1984). Therefore, the above studies imply that the place or distribution considerations play a major role in influencing patterns of users in the purchase of goods or services.
Promotion

Promotion is a communication process that takes place between a business and its various publics. In order to be effective, businesses need to plan promotional activities with the communication process in mind. The elements of the communication process are: sender, encoding, message, media, decoding, receiver, feedback, and noise.

Promotion is the element in the marketing mix of organizations that serve to inform, persuade and remind the market of the product in the hope of influencing the feelings, beliefs and behavior of consumers (Stanton, Etzel and Walker, 2007). The promotional activities include advertising, sales promotion, public relations, direct marketing and word of mouth (word-of-mouth). Through the campaign, marketers can attract the attention of consumers and give them information about products to enhance consumer buying interest. Promotion is important in sales as a way to reach consumers with information about products. It is also an alternative to bring awareness to the users of the existence of a product. When the product is known, is increasing consumer demand for products and increase product sales.

Promotions such as price discounts and buy one get one free are effective promotional tools for encouraging consumers to buy more (Shi, Ka-Man and Gerald, 2005). In response to consumer advertising can be influenced by several factors such as charging ads, ads influence something with taste, culture, and people’s emotions (Simamora, 2001).

Marketing communications play an important role in informing consumers about products and services that are running, including where they can buy and establish a good image and perception. Related promotional laughing stock prices have affected consumer behavior in retail. According to Grunert, Wills and Celemin (2010) a number of studies have been conducted showing that the pricing information is essential for consumers to make a purchase decision. The effectiveness of product advertising on television or social media plays an important role to popularize the products sold.

In terms of advertising spend, the selection of creative and effective replenishment is important. The ads should be removed according to the pattern that is being experienced by the country concerned. Malaysia among the countries that have a strong influence on celebrities. It turns out that this is true when the most famous products using celebrities as ambassador’s business.

One creative way to advertise is to use endorser. Celebrity endorsers are figures of modern marketing. Celebrity endorsement is one of the most popular methods of promotion in the world, using celebrities are beautiful, interesting, and demand by the public so that the products promoted in the popular and famous (Noyer C. And Dimajo. S. 2015).

**METHODOLOGY**

Probability sampling was adopted when elements in the population have a known chance of being chosen as subjects in the sample. Then, the researcher can use sample that is obtained randomly to achieve this probability, and this sampling has least bias and offer more general. According to this research, the researcher has been decided students in Universiti Utara Malaysia were chosen to participate in this study.

To answer the research questions through data collection and subsequence analysis, survey method is powerful and useful in finding the answers. If the population is not correctly targeted, they can do more
harm than good in the study. Besides that, the survey would be in vain if data are not collected from the right people that can provide the correct answer to solve the problem.

Based on Krejcie & Morgan (1970) table to determine the sample size, if the size of population 27,945 students then the sample size will be 379 students. The sample sizes for this study will focus on the students in UUM Sintok. In this study, the population has been determined in which students at UUM and the sample size is 400 respondents. Of the 400 respondents, a total of three hundred and ninety-seven randomly selected to answer a questionnaire about this study. The respondents were selected through the class schedule issued obtained from Student Affairs and Academic Affairs UUM and they are selected based on the time of learning for some time has been set. All selected respondents were given a period of thirty (30) minutes to complete this questionnaire. Meanwhile, of the 400 questionnaires distributed, only 397 were returned and 3 were incomplete and did not respond according to the required specifications.

**FINDINGS AND DISCUSSION**

**Pearson Correlation Analysis**

The correlation analysis describes a relationship between the dependent variable and the independent variable whether exist or not. The purpose of this test is to determine whether the objectives are stated in chapter one can be reached. In addition, these tests can prove the hypothesis that has been established in studies either had a significant relationship (significant) with the consumer preferences.

According to Cohen (1988) as cited in Utah (2013), where $r$ is 0.50 to 1.00, it shows the value of $r$ is strong and large. However, if the value of $r$ is 0.30 until 0.49, it is considered moderate. While if the value of $r$ is 0.10 to 0.29, it shows the value of $r$ weak or small. The results of the test are shown in Table 4.9 below:

<table>
<thead>
<tr>
<th>Product</th>
<th>Price</th>
<th>Place</th>
<th>Promotion</th>
<th>Consumer Preferences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>.553**</td>
<td>.613**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td>.559**</td>
<td>.483**</td>
<td>.541**</td>
<td></td>
</tr>
<tr>
<td>Promotion</td>
<td>.497**</td>
<td>.494**</td>
<td>.445**</td>
<td></td>
</tr>
<tr>
<td>Consumer Preferences</td>
<td>.545**</td>
<td>.494**</td>
<td>.445**</td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).**

Based on the test results of correlation analysis as table 4.25 above, all the independent variables price, place, and promotion demonstrate the value of $r$ is less than 0.5 in which the price of the variable $r$ is 0.381 and the place is 0.494 while the promotion is 0.445. That three independent variables have a moderate relationship with consumer preferences. Meanwhile, with products with a $r$ value of more than 0.5 which is 0.545, which has a strong correlation with consumer preferences.
Multiple Regression Analysis

To test the effect of the relationship between independent variables and the dependent variable, multiple regression analysis test (Multiple Regression Analysis) was used. The results of multiple regression analysis can determine the strength of the relationship between an independent variable which is more significant (significant) towards consumer preferences. Table 2 and Table 3 shows the results of multiple regression analysis tests that have been carried out.

### Table 2
**Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.604</td>
<td>.365</td>
<td>.359</td>
<td>2.62677</td>
</tr>
</tbody>
</table>

### Table 3
**Regression Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>10.277</td>
<td>1.149</td>
</tr>
<tr>
<td>Product</td>
<td>.250</td>
<td>.037</td>
</tr>
<tr>
<td>Price</td>
<td>-.031</td>
<td>.051</td>
</tr>
<tr>
<td>Place</td>
<td>.154</td>
<td>.038</td>
</tr>
<tr>
<td>Promotion</td>
<td>.113</td>
<td>.035</td>
</tr>
</tbody>
</table>

Note: R² = 0.40; F = 56.433; Sig. = 0.00; **p<0.01, p<0.05

The results of multiple regression analysis of Table 2 show the product, price, place and promotion of consumer preferences only affect as much as 36.5%. This value is indicated by the variance of R² (0.365) as factors that affect the independent variables on consumer preferences. In summary score R² by 63.5% representing other factors not analyzed in this study.

Moreover, the overall results of the test results of multiple regression analysis showed that not all independent variables have a relationship with the dependent variable, namely the F = 56.433 (p = 0.000). The results of this test also found that there are only three independent variables, namely dependent variable product (β = 0.355) and place (β = 0.229) and promotions (β = 0.161) had a positive beta coefficient value. For the dependent variable price rates beta coefficient indicates a negative value which is at β = -0.033.

From the test results of multiple regression analysis, the independent variables for the product (p = 0.000) and place (p = 0.000) and promotion (p = 0.002) showed a significant relationship (significant) and the dependent variable as the three variable has a value of p <0.01 and p <0.05. However, another independent variable, were the price did not show any effect and influence on consumer preferences for value p> 0.05, were 0.547.
CONCLUSION

During this study, there are some limitations to be difficult for researchers to complete the study so perfect. The first limitation is the lack of cooperation from some quarters of the respondents in the data collection process. The main focus is on the student at Universiti Utara Malaysia from undergraduate and postgraduate. However, the assistance given is simple, especially in answering the questionnaire. This is evident when the form is not returned questionnaires completely. The second limitation is the lack of updated information in respect of the issue of supplement products among students. This is quite difficult for researchers to get the latest information on issues that arise in order to strengthen the research problem, especially in the aspect of the marketing mix 4P. The problem seems to get less attention and impact entrepreneurs who are not responsible for selling supplement products without the approval of the Ministry of Health. Without realizing it poses a danger to consumers and bring down the good name of the product itself.

The results of this study found that the 4P marketing mix and the impact of consumer preferences in using supplements is 40 percent. This suggests that there are other factors that can improve the methodology of the study so the results of studies. Therefore, the researchers suggested that studies be made in the future to study other aspects such as perception, attitude, culture and others. In addition, this study is limited in the northern region of Malaysia only, at Universiti Utara Malaysia. Thus, the decision is limited in the range of respondents in the north only. Therefore, researchers are encouraged that so enlarged the scope of the study to other countries so that the consumer preferences of supplements can be identified more precisely.

Overall this study, have found that robust health product marketing supplements is at an average level either in terms of management of marketing and consumer preferences. However, the results of this study prove that there is a significant and positive relationship between marketing mix 4P and the consumer preferences in using the health supplement products. This shows that the marketing of health products supplements is to support the concept of the marketing mix 4P. The analysis results showed that the theoretical framework developed by the researchers was successful where the consumer preferences in using supplements is influenced by the marketing mix 4P. Thus, the operators and the consumer should take a lesson from this study to support and improve the marketing of supplement products in addition to marketing health products may continue to be marketed more aggressively in the local and international levels.

ACKNOWLEDGMENT

Yaty Sulaiman is Senior Lecturer of Marketing, School of Business Management, College of Business, Universiti Utara Malaysia 06010 Sintok, Kedah, Malaysia. The author would like to thank The Ministry of Higher Education (MOHE) for granting this research under the Fundamental Research Grant Scheme (FRGS) and Research Innovation Management Centre (RIMC) Universiti Utara Malaysia. This article is under FRGS grant research.

REFERENCES


The Relationship Between Marketing Mix and Consumer Preference in Supplement Product Usage


