A Study of Customers’ Behavior in the Use of Pharmaceutical Services

– Drugstores in the South of Vietnam

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Abstract

The current situation in Vietnam is that patients with their illness can easily go to drugstores to buy medicine by their own prescriptions or drugstore ones. This exists for a long time. This research is not focus on the ways to combat this phenomenon, but we aim to study the factors that are affecting behaviors of patients in choosing drugstores in the South of Vietnam. We employed both quantitative and qualitative methodologies for this research; 400 people responded to survey questions and 10 people involved in interviews. Briefly analysis from quantitative study showed that the affected factors are price and process, which is convenient, and people answered to interview agreed that price and product are the important factors for them to go to drugstores. Hence, the sales and policies makers should pay attention to the needs of customers in doing business of drugstores.

Keywords: marketing mix factors, service behavior, drugstores

1. Introduction

Drugstores are one option of community service selection when people have got illness. In addition to distributing medications to community drugstores also helped public health by providing guidance health care and counseling drug users transferred patients to hospitals to find a doctor who could provide the services accordingly (Hunt & Gunter-Hunt, 1986; Black, 1985). Drugstores are considered as primary health care services by pharmacists provided advice and counseling on health and medicine to those who use our services (Tylee et al., 2007).

From the past to the present, the drugstore retail businesses have been constantly evolving through the development of more diverse services to meet the changing consumer behaviors (Segal-Horn & Davison, 1992).

Vietnamese drugstores are numerous and spread in different areas around the country. From the trend of increase rate of drugstores in the future, thus making the drugstore retail business success today must focus on the service to meet the needs of customers (Oliveira et al., 2002; Wang et al., 2014a). In each drugstore should be planed marketing strategies that make a competitive advantage. The competitiveness can make a difference in terms of marketing mix factors includes product, price, place, promotion, people, physical appearance and process (Karunakaran, 2008; Bommer et al., 2001; Nguyen & Tran, 2015).

This research is focused on studying the factors that affected consumer behavior in the use of pharmacy services in the South of Vietnam. In order to study these factors as a guide to help drugstore entrepreneurs can be planned business strategies with the changing needs of customers and the economy condition in modern times. As a result, the drugstores will be a sustainable business.

We tried to conduct the thesis in order to know the factors that affected service behavior of drugstores in the South of Vietnam. Moreover, we would like to know the needs of customers, which benefits to the drugstores entrepreneur in improving the factors including product, price, place, promotion people, physical appearance and processes. We would then propose as the Usage Guidelines for Strategic Planning in the drugstore retail business.
1.1 Conceptual Model
For the study of factors affecting service behavior of drug store in the South of Vietnam, a conceptual model is presented relationship between the independent variables and the dependent variables in Figure 1 (Nguyen et al., 2015; Mittal & Kamakura, 2001; Diamantopoulos & Winklhofer, 2001). The demographic characteristics including gender, age, level of education, occupation and monthly income. The marketing mix factors include product, price, place, and promotion, people, physical evidence, and process Guo & Jaafer, 2011; Wang et al., 2014b). The service behavior of drugstore including frequency per month, the types of products purchased, and individuals affected decision to use the service, period of service, and the average cost per visit (Chen & Hitt, 2002; Nguyen & Tran, 2017)

![Conceptual Model Diagram](image_url)

Figure 1. Conceptual Model

1.2 Research Hypotheses
This study attempts to investigate the relationship between marketing mix factors and service behavior of drugstores in the South of Vietnam. The contents of the main hypothesis of this study are as follows:

Hypothesis 1: Demographic characteristic factors are positive related to service behavior of drugstore in the South of Vietnam.

Hypothesis 2: Marketing mix factors are positive related to service behavior of drugstore in the South of Vietnam.

2. Research Methodology
Since this research study sought to explore the relationship between Marketing mix factors and service behavior of drugstore in the South of Vietnam using survey method. The empirical research was done with a quantitative research method to find answers to the research questions. Then a qualitative research method was applied to find insights. Steps were as follows:

2.1 Quantitative Research

**Population**
The populations of this research were included people aged 18 years and over who have lived in the South of Vietnam, which does not know the exact number of the population.

**Sample size determination**
Due to large populations and an unknown number of civilians, so the sample size can be calculated from the table Taro Yamane at the confidence level of 95% and an error does not exceed 5% which had a sample size of 400 people.
Data collection

The survey was conducted by 400 people aged 18 and over who have lived in the South of Vietnam. Respondents were selected using convenience sampling. The decision to select respondents were people who agreed to take the survey were handed the questionnaire and instructed to complete the survey on their own. The self-administered questionnaire method was employed to prevent biases since the survey was done in different locations. The respondents did not receive any compensation for completing the questionnaire. The data was collected over a period of 1.5 months from September to late October 2017.

Survey questionnaire development

The questionnaire consists of three sections. Section one evaluates the demographic characteristics information of respondents including gender, age, level of education, occupation and monthly income. This is followed by the next section that measures the importance of marketing mix factors were evaluated on a five-point Likert scale, with 1 corresponding to ‘least important’ and 5 the ‘extremely important’. The third part evaluates service behavior of drugstores in the South of Vietnam of respondents including frequency of purchased per month, the types of products purchased, individuals affected decision to use the service, period of service, and the average cost per visit.

The questionnaire was first pre-tested with 30 respondents. Cronbach’s Alpha test was performed to ensure reliability of variables as Cronbach’s Alpha was 3.13.

Data Analysis Methods

Researchers have determined the statistics used in the analysis as below.

1. Frequency analysis and percentage test was performed to descriptive analysis of demographic characteristics and service behavior of drugstores in the South of Vietnam.
2. Mean and Standard Deviation (SD) test was performed to descriptive analysis of the important of marketing mix factors that affected service behavior of drugstore in the South of Vietnam.
3. Chi-square test was performed in order to test the relationships of the dependent variables and independent variables.

2.2 Qualitative Research

The qualitative research method was applied to get better results with reliable, consistent and up to date with the phenomenon. And the researchers wished to make it clear answers to the questions were ambiguous. The samples used in qualitative research were 10 people aged 18 years old and above in the South of Vietnam with convenience sampling, selected by those who could provide insights and conveniently an interview. The data were collected through in-depth interviews with unstructured interview. The data analyses were presented in the specific information about the study with a content analysis.

3. Study Results

3.1 Quantitative Research

The data collected were analyzed using SPSS Version 19. The results are presented in the following Tables.

Table 1. The description of the respondent according to the demographic characteristics

| Factors | Variable | Frequency | Percentage |
|---------|----------|-----------|------------|
| Gender | Male     | 156       | 39,0%      |
|        | Female   | 244       | 61,0%      |
| Age    | Below 21 years old | 13       | 3,3%      |
|        | 21-30 years old    | 234      | 58,5%     |
|        | 31-40 years old    | 124      | 31,0%     |
|        | Above 40 years old | 29       | 7,3%      |
| Level of education | Count | Percentage |
|-------------------|-------|------------|
| Below bachelor degree | 185 | 46.3% |
| Bachelor degree | 160 | 40.0% |
| Above bachelor degree | 55 | 13.8% |

| Occupation | Count | Percentage |
|------------|-------|------------|
| Student | 15 | 3.8% |
| Public servant | 201 | 50.3% |
| Private employee | 39 | 9.8% |
| Business owner | 145 | 36.3% |

| Monthly income | Count | Percentage |
|----------------|-------|------------|
| Below 10 mil VND | 76 | 19.0% |
| 11-20 mil VND | 265 | 66.3% |
| 21-30 mil VND | 32 | 8.0% |
| Above 30 mil VND | 27 | 6.8% |

![Mean of the important of marketing mix factors](image)

Figure 2. Sample's Responses Regarding the Importance of marketing mix factors that affected service behavior of drugstore

The data shown that total of the important of marketing mix factors was 3.97 by the most of important of the marketing mix factor was people followed by price, process, product, physical evidence, place and promotion.
Table 2. The description of the respondent according to the service behaviors of drug stores

| Factor(s) | Variable                        | Frequency | Percentage |
|-----------|---------------------------------|-----------|------------|
|           | **Frequency of purchased per month** |           |            |
|           | 1-5 times                        | 234       | 59%        |
|           | 6-10 times                       | 153       | 38%        |
|           | 11-15 times                      | 5         | 1%         |
|           | Above 15 times                   | 8         | 2%         |
|           | **The types of products purchased** |           |            |
|           | Drugs                            | 213       | 53.3%      |
|           | Vitamins/food supplements        | 99        | 24.8%      |
|           | Medical equipment                | 45        | 11.3%      |
|           | Personal care                    | 43        | 10.8%      |
|           | **Individuals affected decision to use the service** | | |
|           | Owner                            | 289       | 72.3%      |
|           | Friend                           | 6         | 1.5%       |
|           | Family                           | 45        | 11.3%      |
|           | Spouse                           | 60        | 15.0%      |
|           | **Period of service**            |           |            |
|           | 8.00 AM – 12.00 AM               | 56        | 14.0%      |
|           | 12.00 AM – 4.00 PM               | 34        | 8.5%       |
|           | 4.00 PM – 8.00 PM                | 168       | 42.0%      |
|           | Above 8.00 PM                    | 142       | 35.5%      |
|           | **The average cost per visit**   |           |            |
|           | Below 50,000 VND                 | 201       | 50.3%      |
|           | 51,000-200,000 VND               | 124       | 31.0%      |
|           | 210,000–500,000 VND              | 45        | 11.3%      |
|           | Above 500,000 VND                | 30        | 7.5%       |

Table 3. The relationships of the demographic characteristics and the service behaviors of drug store in the South of Vietnam

| The relationship | frequency of purchased per month | the types of products purchased | individuals affected decision to use the service | period of service | the average cost per visit |
|------------------|----------------------------------|--------------------------------|-----------------------------------------------|------------------|---------------------------|
| Gender           | ✓                                | ✓                              | ✓                                             | ✓                | ✓                         |
| Age              | ✓                                | ✓                              | ✓                                             | ✓                | ✓                         |
| Level of education | ✓                             | ✓                              | ✓                                             | ✓                | ✓                         |
| Occupation       | ✓                                | ✓                              | ✓                                             | ✓                | ✓                         |
| Monthly income   | ✓                                | ✓                              | ✓                                             | ✓                | ✓                         |

Notes
✓ Related
× Unrelated
Table 4. The relationships of the Marketing mix factors and the service behaviors of drug store in the South of Vietnam

| The relationship | frequency of purchased per month | the types of products purchased | individuals affected decision to use the service | period of service | the average cost per visit |
|------------------|----------------------------------|---------------------------------|-----------------------------------------------|------------------|--------------------------|
| Product          | ✓                                | ✓                               | ✓                                             | ✓                | ✓                        |
| Price            | ✓                                | ✓                               | ✓                                             | ✓                | ✓                        |
| Place            | ✓                                | ✓                               | ✓                                             | ✓                | ✓                        |
| Promotion        | ✓                                | ✓                               | ✓                                             | ✓                | ✓                        |
| People           | ✓                                | ✓                               | ✓                                             | ✓                | ✓                        |
| Physical evidence| ✓                                | ✓                               | ✓                                             | ✓                | ✓                        |
| process          | ✓                                | ✓                               | ✓                                             | ✓                | ✓                        |

Notes ✓ Related  × Unrelated

3.2 Qualitative Research

The data were collected through in-depth interviews with a content analysis. The results are presented as follows. The respondents were 4 females and 6 males with average aged 28.5 ± 7.14 years old (range 18-42 years old). The levels of education were below bachelor degree 3 people, bachelor degree 5 people and above bachelor degree 2 people. The occupations were private employee 4 people, public servant 2 people, business owner 2 people and unemployed 1 person.

The monthly income were 10 mil VND per month 4 people, 15 mil VND per month 3 people, 17 mil VND per month 3 people. The service behavior of drugstore shown that the most of frequency of purchased per month were 1-2 time following by 3-4 times and 5-6 times respectively. The most of the types of products purchased were medicines following by vitamin and food supplements, medical equipment and personal care, respectively. The most of individuals that affected the decision to use the service in drugstore found that customers decisions on their own following by friend, family and spouse respectively. The most of the period of service in drugstores would be 4.00 PM – 8.00 PM which were the time of customers back home after work. The most of the average cost per visit were below 50,000 VND following by an average cost per visit about 60,000-100,000 VND.

Table 5. The description of the sample's responses regarding the importance of the marketing mix factors that affected service behavior of drugstore are presented as follows

| Product | The most respondents focused on product quality according to FDA standards. Available in a variety of medications to facilitate the access of services and offering various price options depending on the individual. |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Price   | The most respondents focused on prices lower than neighboring drugstores. The value of the price compare with the service received and explicitly price tag.                                                                 |
| Place   | The most respondents focused on the drugstores that didn’t far from home or work office and had a convenient parking place.                                                                             |
| Promotion | The most respondents focused on drugstores that had a discount or premium including the provision of specialized services such as checking blood pressure, weighing or checking bone mass. |
| People  | The most respondents focused on drugstores that provided pharmacists throughout business hours. Due to the customer’s expectation of the service in drugstores needs an advised by pharmacist directly. Pharmacist and sales staff are attentive and helpful customer service and also have the courtesy to approach customers. |
| Physical evidence | The most respondents focused on drugstores that clean and tidy. The products are arranged into categories.                                                                                       |
| Process | The most respondents focused on drugstores that have prompt services to meet the needs and be able to service and attention to all customers equally.                                                                 |

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The sample's responses regarding the importance of the marketing mix factors that affected service behavior of drugstore prioritized by the most to least are as follows:

1. People
2. Price
3. Product
4. Process
5. Physical evidence
6. Place
7. Promotion

6. Conclusions

The findings from both quantitative research and qualitative research concluded that marketing mix factors are positive related with service behavior of drugstore in the South of Vietnam.

The most of the important of marketing mix factors that affected service behavior of drugstore was people as the most respondents focused on drugstores that provided pharmacists throughout business hours. Due to the customer’s expectation of the service in drugstores needs an advised by pharmacist directly. Pharmacist and sales staff are attentive and helpful customer service and also have the courtesy to approach customers.

Therefore, the way to making drugstore retail business success today must focus on the service to meet the changing customer behavior. Drugstore entrepreneurs should develop a marketing strategy by focusing on store pharmacist skills and the sales staff service mind. The sales training techniques and the needs of customers should be focused.

7. Limitations

This study was limited from the location. Selections of respondents were urban or suburban which may not be representative of total the South of Vietnam.

8. Recommendations

From the assumptions and conclusions of this study based on the hypotheses, we conclude that there are significant positive relationships to advance the goals of the drugstore. In connection with the study, the following recommendations are offered.

1. Vietnamese Government should have more stringent policies regarding the availability of the pharmacist at the drug store in every store and supported drugstores that provided pharmacists throughout business hours.
2. Each drug store should have a pharmacist's licensed badge clearly, so consumers trust that has been served properly by the pharmacist every time when they used the service.
3. The customers paid more attention to people factor, so drugstore entrepreneur should have a marketing strategy that focuses on pharmacists and sales staffs serving as a training policy to educate pharmacists and sales staffs. Teaching sales techniques and services focused on the needs of customers.
4. Pricing should be close with competitors and providing service exceeds the expectations of the customer, also recruiting partners to keep costs low to increase abilities competitive on price.
5. POS management system by using computer software to facilitate rapid and accurate as the needs of customers.
6. More product recruitment such as vitamins, food supplements, cosmetics or medical equipment to create attraction and meet the needs of customers.

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