## FACTORS INFLUENCING CONSUMERS ON SELECTING A PARTICULAR MODERN PHARMACY IN BANGKOK

# **RUNGRAVEE JAIBOON**

## A THEMATIC PAPER SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF MANAGEMENT COLLEGE OF MANAGEMENT MAHIDOL UNIVERSITY 2019

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## Thematic paper entitled FACTORS INFLUENCING CONSUMERS ON SELECTING A PARTICULAR MODERN PHARMACY IN BANGKOK

was submitted to the College of Management, Mahidol University for the degree of Master of Management on December 22, 2019

Assoc. Prof. Dr. Roy Kouwenberg, Ph.D., CFA Advisor Miss Rungravee Jaiboon Candidate

Assist. Prof. Dr. Winai Wongsuwarat, Ph.D. Chairperson

Duangporn Arbhasil, Ph.D. Dean College of Management Mahidol University Ronald Vatana nan - Thesenvitz Ph.D. Committee member



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Rungravee Jaiboon



# FACTORS INFLUENCING CONSUMERS ON SELECTING A PARTICULAR MODERN PHARMACY IN BANGKOK

RUNGRAVEE JAIBOON 6149067

M.M. (MARKETING AND MANAGEMENT)

THEMATIC PAPER ADVISORY COMMITTEE: ASSOC. PROF. ROY KOUWENBERG, Ph.D., CFA, ASS.PROF. WINAI WONGSURAWAT, Ph.D., RONALD SURACHAI WATANANAN, Ph.D.

#### ABSTRACT

The number of pharmacies in Thailand is growing, especially in Bangkok. To understand consumers' demand and preferences, this research is conducted to find out the important factors influencing consumers on selecting a particular modern pharmacy in Bangkok and the difference of each factors in demographics groups (based on gender, age, income and education). The data is collected by using online questionnaire. The framework for the research consists of six group factors; Pharmacist, Pharmacy staff, Location, Price, Medicine and In-store environment and the respondents are classified by gender, age level, income level and education level. There are 217 respondents in the research. The findings show that the most important group factors are Medicine, In-store environment and Pharmacist. And the group factors that are significantly different in gender groups are Pharmacist, Price and Medicine. But there is no group factor that is significantly different in age groups, income groups and education groups.

KEY WORDS: Modern pharmacy/ Bangkok/ Influencing factors/ Pharmacist/ Medicine

41 pages

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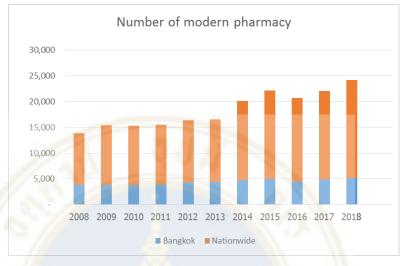
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# CHAPTER I INTRODUCTION

In Thailand pharmacy market sales value is around 35 thousand million THB. It shares 20% of the total medical market including of hospital channel and pharmacy channel. (Source: IQVIA MAT2019/06). Pharmacy is classified according to licensing into four types; modern pharmacy, modern pharmacy that can sell only non-dangerous medicine, modern pharmacy that can sell only veterinary medicine and traditional pharmacy. For modern medicine for humans, it also is categorized into four types; over the counter medicine, non-dangerous medicine, dangerous medicine and special controlled medicine. All categories of modern medicine must be sold in pharmacy except over the counter medicine that can be sold in any place. This research only focus on modern pharmacy because it is the most common type. In 2018, modern pharmacy contributed 76% of total pharmacies in Thailand.

Modern pharmacy is an option for consumers who are looking for healthcare service close to their home. As the law of Thai FDA, at a modern pharmacy, a pharmacist has the right to do counseling and dispensing medicine not only over-thecounter drugs but also non-chronic and chronic medicines that are categorized as dangerous. Beside that the pharmacist can dispense special controlled medicine such as Sildenafil, Tadalafil, etc., in case that consumers show their prescriptions from doctors. In the past 10 years, number of modern pharmacies in Thailand has continually increased especially in Bangkok. In 2018 there are 18,900 modern pharmacies registered with Thai FDA. Expansion growth is 88% comparing with 2008. For Bangkok there are 5,233 modern pharmacies. Expansion growth is 37% compared with 2008. (Source: Bureau of Drug Control). Pharmacy chain stores such as Boots, Watsons, etc., and modern trade likes Pure, Lotus also keep opening new branches. Recently, FDA has started a pilot project to reduce the waiting time and overcrowding of patients in hospitals. Patients who are under the healthcare insurance from government can go to receive chronic medicines at modern pharmacies that are included in the project. Knowing the key factors that influence consumers on selecting a particular pharmacy may be beneficial to pharmacy owners to develop and fulfil consumers' needs. So this research aims to find out the factors that influence consumers in their selection of a modern pharmacy.



(Source: Bureau of Drug Control)

#### **1.1 Problem Statement**

In the future the number of pharmacies could grow even larger, providing the consumers many choices. Competition between modern pharmacies could therefore become very high. To be competitive, pharmacy owner must know how to develop their pharmacies to keep consumers visiting their pharmacies and therefore understand the consumer demand and preferences.

#### **1.2 Research Questions**

1.2.1 What are the key factors influencing consumers on selecting a particular modern pharmacy in Bangkok?

1.2.2 How are demographic characteristics related to the factors influencing consumers on selection of a modern pharmacy?

### **1.3 Research Objective**

To find out what are the important factors that influence consumers to visit a particular modern pharmacy instead of others.

#### **1.4 Research Scope**

The research focuses on consumers who used to visit particular modern pharmacy to purchase products or receive pharmacy services. The target area is Bangkok. The number of modern pharmacies in Bangkok is 28% share of the nationwide total (77 provinces), so a study of the Bangkok market is clearly relevant. The income and socio-economic status of consumers in Bangkok and the provinces are also different, so it is better to limit the scope. Further, the store density is 3 per square kilometer in Bangkok, making competition for customers especially high.

#### **1.5 Expected Benefits**

Pharmacy owners and people who interested in opening their own modern pharmacies in the greater Bangkok area can apply the knowledge to better market and develop their pharmacy to be competitive. Consumers can receive better services that meet their expectations. Government hospitals that have faced overcrowding problem can get benefit from decreasing number of patients visiting to hospital as consumers will prefer to visit the pharmacy first.

# CHAPTER II LITERATURE REVIEW

As a part of pharmaceutical care, a pharmacist has the responsibility to take care of the safety of patients in using medicines. In the past, because of the low number of pharmacist, Thai FDA allowed pharmacist to be available at pharmacy during some parts of opening hours, but during the time without availability of pharmacist, pharmacy staff can sell only over-the-counter drugs and non-dangerous medicines. In 2014 as good pharmacy practice (GPP) is implemented, pharmacist must be available all the time of opening hours and pharmacist has a responsibility to organize pharmacy to comply with GPP. So in Thailand, pharmacist plays an important role in the pharmacy.

Some studies find that pharmacist is one factor influencing on consumers' selection of pharmacy. The study in Pakistan finds that the expectation on pharmacist is to do counseling about usage of medicine, drug interaction, and patient's sickness or diseases. The data is collected by questionnaire and analyzed by SPSS 20.0. There are 317 respondents who are willing to do the questionnaire. (Iffat, W., Shakeel, S., Imam, S., & Quds, T., 2015). Another study in Thailand finds that consumers need pharmacist that has a counseling skill and can be available at pharmacy all the time of opening hours. The authors collect data by doing focus group interview with pharmacy owners and pharmacists first to acquire information about consumer demand and services in pharmacy and then create the questionnaire for consumers who are visiting pharmacies. Data is analyzed by using SPSS and descriptive statistics. (Pithayanukul et.al, 2017).

In the study of "Comparison of factors influencing patient choice of community pharmacy in Poland and in the UK, and identification of components of pharmaceutical care", the objective is to find out the relation of pharmaceutical care and consumers loyalty to pharmacy. Loyalty to pharmacy means consumers are likely to visit the same pharmacy. The authors collect data by using the questionnaire and analyze data by using SPSS 20.0. The respondents are people who visited a pharmacy. The questionnaire consists of two parts. First part consists of demographic characteristic of

respondents and their use of pharmacy. Second part consists of factors influencing on pharmacy selection. They focus on seven factors; 1.Good advice received in pharmacy, 2.Possibility of discussing personal health issues in private consultation room, 3.Aesthetic decoration of pharmacy, 4.Professional service, 5.Location of pharmacy, 6.Good price on medicines and 7.Promotion on medicines. The result shows that in UK, professional service, location and good advice received in the pharmacy are the most important factors while in Poland, location, professional service and good price on medicines are the most important factors. Components of pharmaceutical care in terms of good advice and professional service of pharmacist are more important factors in UK than in Poland. And the result also shows that consumers in UK are more likely to go to the same pharmacy than consumers in Poland. As in Poland pharmaceutical care is not implemented, but in UK it is already implemented. So the authors suggests that implementing Pharmaceutical care in Poland could help to increase loyalty to the pharmacy and lead to increased attractiveness of the business. (Merks, P., Kaźmierczak, J., Olszewska, A. E., & Kołtowska-Häggström, M., 2014).

Not only in Poland that location is the most important factor, the study "The assessment of patient satisfaction" and attendance of community pharmacies in Slovakia also finds that the location of the pharmacy is important. The authors collect data by using questionnaire. The respondents are the customers of randomly selected 33 pharmacies in 23 cities. (Mináriková, D., Malovecká, I., Lehocká, E., Snopková, M., & Foltán, V., 2016). Convenient location can lead to high level of consumer satisfaction. (Sriratanavit, 2014). In Malaysia, location with available car parking is important as most people travel by their own vehicles. They randomly distribute questionnaire to 400 respondents in Wakaf Bharu, a small town in Kelantan. But there is only 120 respondents who return the questionnaire. The data is analyzed by using SPSS. (Shaharuddin, S., Zamaludin, A., Hashim, R., Hadi, M. A., & Ming, L. C., 2015). Consumers prefer a pharmacy located near their home place or work place with convenient transportation. (Pithayanukul et.al, 2017).

Effective and successful way to achieve the goal and be accepted in the market is to know and to fulfil consumer's needs. (Mackowiak, J. I., & Manassee, H. R., 1988). Different groups of consumers have different needs that impact on the factors influencing on pharmacy selection. (Santipanupol et.al, 2017). Another study also finds

that the most important factors on pharmacy selection can be different among clustesr. The study is conducted in Thessaloniki, Greece. The topic is "Community pharmacy customer segmentation based on factors influencing their selection of pharmacy and over-the-counter medicines". In part of factors influencing selection of pharmacy, the authors focus on eight factors including 1. Pharmacy's location, 2. Opening hours, 3.Pharmacy's staff, 4.Anonymity/confidentiality, 5.Store's atmosphere, 6.Product range, 7.Additional services and 8.Membership program. They run the questionnaire test with 300 respondents who visit public places such as shopping center, transportation station etc. They find three clusters that have differences in consumer's preference and demographic characteristic. The first cluster is mostly young, student or employed, high education and low to high income. Consumers in this cluster don not visit the same pharmacy and do not make a relationship with pharmacy's staff. This cluster is classified as convenience consumers. Pharmacy's location is the most important factor for this cluster. The second cluster is mostly retired, low to moderate education and moderate income. Consumers in this cluster always visit the same pharmacy and want to be familiar with pharmacy's staff. This cluster is classified as loyal customers. Pharmacy's staff is the most important factor for this cluster. The third cluster is mostly retired, unemployed, and low to moderate education and low income. This group is classified as convenience and price-sensitive customers. For this cluster, opening hour is the most important factor. (Kevrekidis, D. P., Minarikova, D., Markos, A., Malovecka, I., & Minarik, P., 2018)

Using information from previous research, this study will categorize the groups of factors into pharmacist, staff, location, price, medicine and in-store environment and investigate to see the importance of each factor for Thai consumer selection of pharmacy and how each factor relates to demographic characteristics.

Eastan	UK/Poland	Pakistan	Slovak	Thailand	Greece
Factors	(2014)	(2015)	(2016)	(2017)	(2018)
Pharmacist knowlegde		Х		Х	
Good advice received in pharmacy	х				
Lebel my medications.		Х			
Anonymity, confidentiality					х
Possibility of discussing personal health issues in					
private consultation room	х				
Pharmacy's staff					х
Qualified and friendly personnel			х		
Acquintance with the pharmacy staff		Х			
Professional service	х				
Location of pharmacy	х	Х	х	Х	х
Good price on medicines	X				
Good and competitive prices	11.0	Х		X	
Promotion on medicines	х				
Membership program					х
Quick services		Х			
Good range of products and services		X			х
Quality of medicine					
Opening hours			х		х
Store's atmosphere					х
Additional services					х
Good experience			X		
Self-sevice area			Х		
Aesthetic decoration of pharmacy	X				

Figure 2.1 Overall factors in previous studies

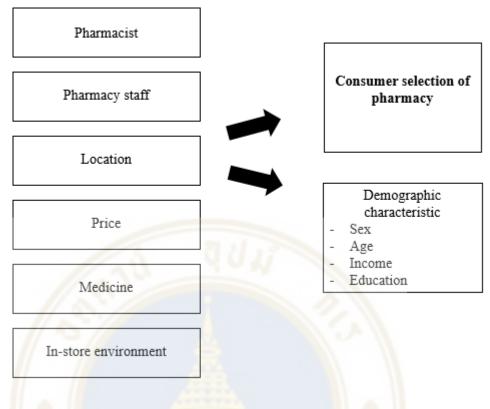


Figure 2.2 Frame work in this research

# CHAPTER III RESEARCH METHODOLOGY

This research uses the quantitative method by using a survey questionnaire to collect the data. The survey questionnaire is used because the study needs a variety and a large number of respondents to be the representative of population as the objectives of the study are to find the key factors that influence consumers on selecting a particular pharmacy in Bangkok and to find how demographic characteristic are related to those factors.

#### **3.1 Sample size**

The sample size target is 100 respondents. The respondents are people who used to purchase products or receive pharmacy services in any pharmacy in Bangkok area and are willing to participate in the research

#### **3.2 Questionnaire Design**

The survey questionnaire consists of two parts. The first part is the demographic part (sex, age, income and education). Gender is classified into male and female. Age is classified into young (17-23 years old as most of this age group are university), early adult (24-39 years old), middle adult (40-59 years old) and retirement age (above 60 years old). Income is classified into no income, low income (below 25,000 THB/month), middle income (25,000 – 100,000 THB/month) and high income (above 100,000 THB/month). And education is classified into low education (below or equivalence to high school), middle education (diploma or bachelor's degree) and high education (master's degree or doctoral degree). The second part is factors influencing on consumers selection of pharmacy according to the framework (pharmacist, pharmacy staff, location, price, medicine and in-store environment). In this part the respondents

are requested to rate the level of importance for each factor when selecting a particular pharmacy by using the scale from 1 to 5.

- 1 = Not at all important
- 2 = Not very important
- 3 = Somewhat important
- 4 = Very important
- 5 = Extremely important

## **3.3 Data Analysis**

The survey questionnaire is conducted by using online survey and data is analyzed by descriptive statistics and statistical tests using SPSS program.



# CHAPTER IV RESEARCH FINDINGS

## 4.1 Demographic part

There are 211 respondents in this study. 125 respondents are female and 86 respondents are male (Figure 4.1). There are 116 respondents in between 24-39 yr., 70 respondents in between 40-59 yr., 20 respondents above 60 yr. and 5 respondents in between 17-23 yr. (Figure 4.2). 140 respondents have income between 25,000 – 100,000 THB/month. 50 respondents have income below 25,000 THB/month. 12 respondents have income above 100,000 THB/month. And 9 respondents have no income (Figure 4.3). 137 respondents graduated with diploma or bachelor's degree. 60 respondents graduated with master's degree or doctoral degree. And 14 respondents graduated with below or equivalent to high school (Figure 4.4). 143 respondents are living with children under 18 yr. (Figure 4.5). And 54 respondents have to take care of children below 12 yr. (Figure 4.6). 89 respondents have to purchase a prescription medicine or chronic medicine from a pharmacy for themselves or for a family member (Figure 4.7). 74 respondents visit a pharmacy 5-6 times/year. 65 respondents visit a pharmacy less or equal to 4 times/year. 45 respondents visit a pharmacy 7-12 times/year and 27 respondents visit more than 12 times/year (Figure 4.8).

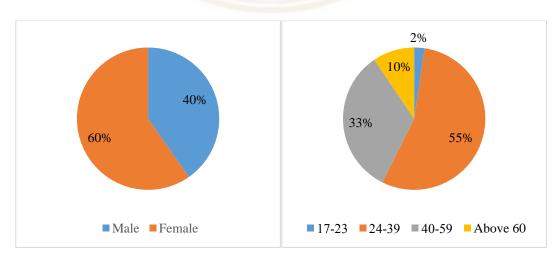
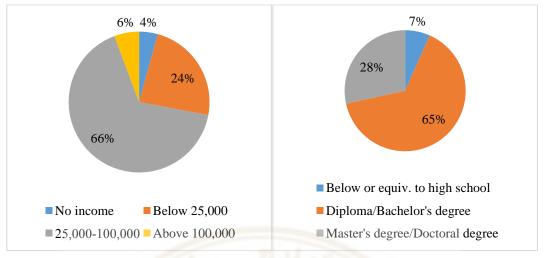


Figure 4.1 Gender

Figure 4.2 Age





**Figure 4.4 Education** 

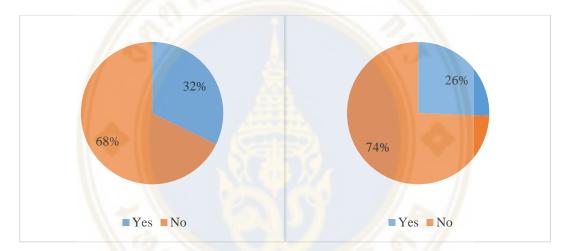


Figure 4.5 Living with children below 18 yr. Figure 4.6 Taking care of children below 12 yr.

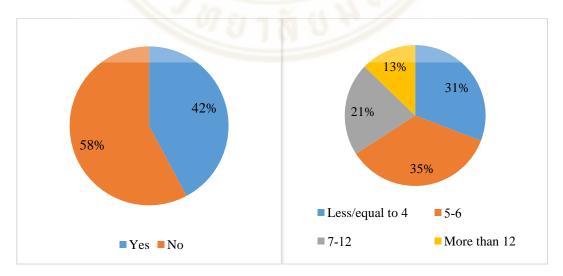


Figure 4.7 Purchasing chronic medicine Figure 4.8 Frequency of pharmacy visit (times/year)

## **4.2 Factors influencing consumer selection of a pharmacy**

Top three of the important factors based on mean score are 1.Pharmacist is qualified and knowledgeable, 2.Medicine has a good labelling with indication and dosage and 3.In-store is clean and light. The mean scores are 4.67, 4.62 and 4.60 respectively (Table 4.1).

Descriptive Statistics							
	N	Min	Max	Mean	Std. Deviation		
2.3 Pharmacist is qualified and knowledgeable.	211	2	5	4.67	.579		
2.19 Medicine has a good labelling with indication and dosage.	211	2	5	4.62	.646		
2.22 In-store is clean and light.	211	2	5	4.60	.619		
2.23 In-store medicines are well-organized on the shelf.	211	2	5	4.49	.679		
2.18 Medicine has a long shelf life.	211	1	5	4.49	.847		
2.1 Pharmacist provides good counseling.	211	2	5	4.40	.806		
2.2 Pharmacist is available all the time of opening hours.	211	1	5	4.37	.855		
2.20 Medicine has wide variety.	211	1	5	4.36	.830		
2.16 Price of medicine is standard with clear label or price tag.	211	1	5	4.31	.909		
2.21 Medicines from reputable brands.	211	1	5	4.27	.913		
2.9 Location of pharmacy is close to home or work place.	211	1	5	4.16	.990		
2.7 Pharmacy staff is qualified and knowledgeable.	211	1	5	4.13	.930		
2.6 Pharmacy staff always has a smiling face.	211	1	5	4.05	.927		
2.5 Pharmacy staff provides good service.	211	1	5	3.93	.939		
2.17 Price of medicine is competitive.	211	1	5	3.92	1.007		
2.11 Location of pharmacy has sufficient parking.	211	1	5	3.89	1.092		
2.14 Price of medicine is cheaper than others.	211	1	5	3.88	1.155		
2.24 In-store has the air-conditioning.	211	1	5	3.86	1.102		
2.4 Pharmacist provides a discussion in consultation area.	211	1	5	3.76	1.143		
2.12 Location of pharmacy is close market or shopping mall.	211	1	5	3.64	1.165		
2.8 Pharmacy staff is familiar with me.	211	1	5	3.09	1.239		
2.10 Location of pharmacy is close to hospital.	211	1	5	2.97	1.199		
2.15 Price of medicine can be negotiated.	211	1	5	2.90	1.315		
2.13 Location is important than pharmacist	211	1	5	2.29	1.171		

#### Table 4.1 Mean score of each factors

The group factors from most to less important based on mean score are Medicine, In-store, Pharmacist, Pharmacy staff, Price and Location. Mean scores are 4.43, 4.32, 4.30, 3.80, 3.75 and 3.39 respectively (Table 4.2)

13

Table 4.2 Mean score	of each group factor
	Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
Medicine	211	2.00	5.00	4.4336	.62610
InStore	211	1.67	5.00	4.3191	.64759
Pharmacist	211	2.00	5.00	4.3021	.62698
PharmacyStaff	211	1.00	5.00	3.7998	.79650
Price	211	1.00	5.00	3.7547	.82302
Location	211	1.40	4.80	3.3896	.62189
Valid N (listwise)	211				

# 4.2.1 Medicine

The highest mean score of Medicine is Medicine has a good labelling with indication and dosage.

#### Table 4.3 Mean score of Medicine factors

Descriptive Statistics					
	N	Min	Max	Mean	Std. Deviation
2.18 Medicine has a long shelf life.	211	1	5	4.49	.847
2.19 Medicine has a good labelling with indication and dosage.	211	2	5	4.62	.646
2.19 Medicine has wide variety.	211	1	5	4.36	.830
2.21 Medicines from reputable brands.	211	1	5	4.27	.913
Medicine	211	2.00	5.00	4.4336	.62610
Valid N (listwise)	211		$\sim <$	1	

#### 4.2.2 In-store environment

The highest mean score of In-store is In-store is clean and light.

## Table 4.4 Mean score of In-store environment factors

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	
2.22 In-store is clean and light.	211	2	5	4.60	.619	
2.23 In-store medicines are well-organized on the shelf.	211	2	5	4.49	.679	
2.24 In-store has the air-conditioning.	211	1	5	3.86	1.102	
InStore	211	1.67	5.00	4.3191	.64759	
Valid N (listwise)	211					

#### 4.2.3 Pharmacist

The highest mean score of Pharmacist is Pharmacist is qualified and knowledgeable.

#### **Table 4.5 Mean score of Pharmacist factors**

Descriptive Statistics						
					Std.	
	Ν	Min	Max	Mean	Deviation	
2.1 Pharmacist provides good counseling.	211	2	5	4.40	.806	
2.2 Pharmacist is available all the time of opening hours.	211	1	5	4.37	.855	
2.3 Pharmacist is qualified and knowledgeable.	211	2	5	4.67	.579	
2.4 Pharmacist provides a discussion in consultation area.	211	1	5	3.76	1.143	
Pharmacist	211	2.00	5.00	4.3021	.62698	
Valid N (listwise)	211					

#### 4.24 Pharmacy staff

The highest mean score of Pharmacy staff is Pharmacy staff provides good

service.

#### Table 4.6 Mean score of Pharmacy staff factors

Descriptive Sta	tistics		1		
					Std.
	Ν	Min	Max	Mean	Deviation
2.5 Pharmacy staff provides good service.	211	1	5	3.93	.93
2.6 Pharmacy staff always has a smiling face.	211	1	5	4.05	.92
2.7 Pharmacy staff is qualified and knowledgeable.	211	1	5	4.13	.93

#### **4.2.5 Price**

2.8 Pharmacy staff is familiar with me.

The highest mean score of Price is Price of medicine is standard with clear

211

211

211

5

5.00

1

1.00

3.09

3.7998

label or price tag.

PharmacyStaff

Valid N (listwise)

#### **Table 4.7 Mean score of Price factors**

Descriptive St	atistics				
					Std.
	Ν	Min	Max	Mean	Deviation
2.14 Price of medicine is cheaper than others.	211	1	5	3.88	1.155
2.15 Price of medicine can be negotiated.	211	1	5	2.90	1.315
2.16 Price of medicine is standard with clear label or	211	1	5	4.31	.909
price tag.					
2.17 Price of medicine is competitive.	211	1	5	3.92	1.007
Price	211	1.00	5.00	3.7547	.82302
Valid N (listwise)	211				

Decorintivo Statistic

## 4.2.6 Location

The highest score for Location is Location of pharmacy is close to home or work place.

.939

.927

.930

1.239

.79650

					Std.
	Ν	Min	Max	Mean	Deviation
2.9 Location of pharmacy is close to home or work place.	211	1	5	4.16	.990
2.10 Location of pharmacy is close to hospital.	211	1	5	2.97	1.199
2.11 Location of pharmacy has sufficient parking.	211	1	5	3.89	1.092
2.12 Location of pharmacy is close market or shopping mall.	211	1	5	3.64	1.165
2.13 Location is important than pharmacist	211	1	5	2.29	1.171
Location	211	1.40	4.80	3.3896	.62189
Valid N (listwise)	211				

## **4.3 Differences between groups on factors**

#### 4.3.1 Gender

There are significantly different mean scores between male and female for these factors; Pharmacist is available all the times of opening hours, Pharmacist is qualified and knowledgeable, Pharmacy staff is qualified and knowledgeable, Price of medicine can be negotiated, Price of medicine is standard with clear label or price tag, Price of medicine is competitive, Medicine has a long shelf life, Medicine has a good labelling with indication and dosage, Medicine has wide variety, Medicine from reputable brands, In-store is clean and light and In-store medicines are well-organized on the shelf. In all cases women assign higher values to these items on average than men.

Table 4.9	Difference	between	Genders

Group Statist	ics				
	1.1				Std.
	Sex			Std.	Error
	261	N	Mean	Deviation	Mean
2.2 Pharmacist is available all the time of opening hours.	Male	86	4.21	.909	.098
	Female	125	4.49	.799	.071
2.3 Pharmacist is qualified and knowledgeable.	Male	86	4.51	.646	.070
	Female	125	4.78	.501	.045
2.7 Pharmacy staff is qualified and knowledgeable.	Male	86	3.93	1.003	.108
	Female	125	4.26	.853	.076
2.15 Price of medicine can be negotiated.	Male	86	2.66	1.343	.145
	Female	125	3.06	1.275	.114
2.16 Price of medicine is standard with clear label or price	Male	86	4.07	.992	.107
tag.	Female	125	4.48	.809	.072
2.17 Price of medicine is competitive.	Male	86	3.70	1.018	.110
1.20	Female	125	4.08	.972	.087
2.18 Medicine has a long shelf life.	Male	86	4.20	1.027	.111
	Female	125	4.69	.628	.056
2.19 Medicine has a good labelling with indication and	Male	86	4.44	.679	.073
dosage.	Female	125	4.74	.594	.053
2.20 Medicine has wide variety.	Male	86	4.16	.919	.099
666	Female	125	4.50	.736	.066
2.21 Medicines from reputable brands.	Male	86	4.08	.961	.104
	Female	125	4.39	.860	.077
2.22 In-store is clean and light.	Male	86	4.41	.709	.076
	Female	125	4.74	.510	.046
2.23 In-store medicines are well-organized on the shelf.	Male	86	4.33	.774	.083
	Female	125	4.61	.581	.052

#### Group Statistics

				dependent Samples Test							
		Levene's									
		for Equal Variance				t-test	for Equality of	f Means			
		v ar lance.	,			1-1031	Tor Equancy 0	Std. Error	95% Co	nfidence	
						Sig.		Difference	Interval		
						(2-	Mean		Differen	ice	
		F	Sig.	t	df	tailed)	Difference		Lower	Upper	
2.2 Pharmacist is	Equal	.986	.322	-2.352	209	.020	279	.118	512	045	
available all the time	variances										
of opening hours.	assumed Equal			-2.297	167.087	.023	279	.121	518	039	
	variances not			2.277	107.007	.025	.279	.121	.510	.057	
	assumed										
2.3 Pharmacist is	Equal	24.578	.000	-3.443	209	.001	272	.079	428	116	
qualified and knowledgeable.	variances assumed										
knowledgeable.	Equal			-3.287	152.108	.001	272	.083	436	109	
	variances not										
	assumed					0.1.0					
2.7 Pharmacy staff is qualified and	Equal variances	.774	.380	-2.597	209	.010	334	.129	587	080	
knowledgeable.	assumed	-									
	Equal			-2.521	162.970	.013	334	.132	595	072	
	variances not			_							
2.15 Price of medicine	assumed Equal	2.063	.152	-2,198	209	.029	401	.183	761	041	
can be negotiated.	variances	2.005	.132	-2.198	209	.029	401	.105	/01	041	
eun de negetiatea.	assumed										
	Equal			-2.177	176.570	.031	401	.184	765	038	
	variances not										
2.16 Price of medicine	assumed Equal	2.384	.124	-3.298	209	.001	410	.124	655	165	
is standard with clear	variances	2.504	.124	-5.270	207	.001	+10	.124	055	105	
label or price tag.	assumed										
	Equal			-3.177	157.998	.002	410	.129	665	155	
	variances not assumed										
2.17 Price of medicine	Equal	.490	.485	-2.753	209	.006	382	.139	656	109	
is competitive.	variances										
	assumed										
	Equal variances not			-2.730	177.253	.007	382	.140	659	106	
	assumed						//				
2.18 Medicine has a	Equal	28.151	.000	-4.300	209	.000	490	.114	715	266	
long shelf life.	variances						~ /				
	assumed Equal			-3.949	128.473	.000	490	.124	736	245	
	variances not			5.717	120.475	.000	.150	.124	.750	.245	
	assumed										
2.19 Medicine has a	Equal	11.208	.001	-3.422	209	.001	302	.088	476	128	
good labelling with indication and dosage.	variances assumed	V/									
indication and dosager	Equal			-3.339	166.490	.001	302	.090	481	123	
	variances not										
2.20 Madicine her	assumed	2 202	122	-2.917	200	004	222	117	550	100	
2.20 Medicine has wide variety.	Equal variances	2.283	.132	-2.91/	209	.004	333	.114	558	108	
	assumed										
	Equal			-2.801	155.898	.006	333	.119	568	098	
	variances not assumed										
2.21 Medicines from	Equal	.007	.931	-2.457	209	.015	311	.126	560	061	
reputable brands.	variances										
	assumed			a ::	1.00 2.00	<u></u>					
	Equal variances not			-2.407	169.360	.017	311	.129	565	056	
	assumed										
2.22 In-store is clean	Equal	23.058	.000	-3.919	209	.000	329	.084	495	164	
and light.	variances										
	assumed Equal			-3.694	143.822	.000	329	.089	505	153	
	variances not			-5.094	175.022	.000	529	.009	505	155	
	assumed										
2.23 In-store	Equal	13.319	.000	-3.027	209	.003	282	.093	466	099	
medicines are well- organized on the	variances assumed										
shelf.	Equal			-2.874	148.345	.005	282	.098	477	088	
	variances not										
	assumed									l	

Independent Samples Test

#### 4.3.2 Age

There is significantly different mean score between 40 - 59 yr. group and 24 - 39 yr. group for one factor; Price of medicine can be negotiated, which is more important for the middle-age group (40-59 years).

		Ν	Multiple Compar	risons			
Dependent Variable	(I) 1.2 Age	(J) 1.2 Age	Mean			95% Confide	
v arrable			Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
2.15 Price of	17-23	24-39	924	.588	.707	-2.49	.6
medicine can		40-59	-1.471	.596	.087	-3.06	.1
be negotiated.		Above 60	-1.100	.644	.535	-2.82	.6
	24-39	17-23	.924	.588	.707	64	2.4
		40-59	547*	.195	.033	-1.07	0
		Above 60	176	.312	1.000	-1.01	.6
	40-59	17-23	1.471	.596	.087	12	3.0
		24-39	.547*	.195	.033	.03	1.0
		Above 60	.371	.327	1.000	50	1.24
	Above	17-23	1.100	.644	.535	62	2.8
	60	24-39	.176	.312	1.000	66	1.0

**Table 4.10 Difference between Age group** 

\*. The mean difference is significant at the 0.05 level.

40-59

### **4.3.3 Income**

There is no factor that mean scores are significantly different among groups.

-.371

1.000

-1.24

.327

#### **4.3.4 Education**

There is significantly different mean score between diploma/bachelor's degree group and master's degree/Doctoral degree group in one factor; In-store medicines are well-organized on the shelf, which is more important for the diploma/bachelor's degree group on average.

.64 .12 .62

2.49 -.03 .66

3.06 1.07 1.24

2.82 1.01

.50

		Multiple Com	parisons				
Dependent Variable	(I) 1.4 Education	(J) 1.4 Education	Mean Difference (I-	Std.		95% Confide Lower	Upper
			J)	Error	Sig.	Bound	Bound
2.23 In-store medicines are	Below or equivalent to high school	Diploma/Bachelor's degree	227	.188	.688	68	.23
on the shelf.	well-organized on the shelf.	Master's degree/Doctoral degree	.040	.199	1.000	44	.52
	Diploma/Bachelor's degree	Below or equivalent to high school	.227	.188	.688	23	.68
		Master's degree/Doctoral degree	.267*	.104	.032	.02	.52
	Master's degree/Doctoral	Below or equivalent to high school	040	.199	1.000	52	.44
	degree	Diploma/Bachelor's degree	267*	.104	.032	52	02

## Table 4.11 Difference between Education group

\*. The mean difference is significant at the 0.05 level.

#### 4.3.5 Living with children below 18 yr.

There are significantly different mean scores between respondents who live with children below 18 yr. and respondents who have not for these factors; Medicine has a long shelf life and In-store is clean and light. Both are assigned higher mean values by respondents with children.

#### Table 4.12 Difference between Living with children group

	Group Statistics											
	1.5 Do you have children living in your house? (Below 18 years old)	N	Mean	Std. Deviation	Std. Error Mean							
2.18 Medicine	Yes	68	4.68	.633	.077							
has a long shelf life.	No	143	4.40	.920	.077							
2.22 In-store	Yes	68	4.74	.477	.058							
is clean and light.	No	143	4.54	.669	.056							

Independent Samples Test										
		Levene's for Equal Variances	ity of			t-test	for Equality of			
						Sig. (2-	Mean	Std. Error	95% Confider Interval Differen	of the
		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper
2.18 Medicine has a long shelf life.	Equal variances assumed Equal	12.314	.001	2.248 2.555	209 182.339	.026	.278 .278	.124	.034	.522
	variances not assumed									
2.22 In-store is clean and light.	Equal variances assumed	16.460	.000	2.177	209	.031	.197	.090	.019	.375
	Equal variances not assumed			2.446	177.656	.015	.197	.080	.038	.356

#### Independent Samples Test

#### 4.3.6 Taking care of children below 12 yr.

There are significantly different mean scores between respondents who have to take care of children below 12 yr. and respondents who have not for these factors; Pharmacy staff provides good service, Pharmacy staff is qualified and knowledgeable, Medicine has good labelling with indication and dosage and In-store is clean and light. **Table 4.13 Difference between Taking care of children group** 

	Group Statistics										
	1.6 Do you have to take care of children below 12 years old?	N	Mean	Std. Deviation	Std. Error Mean						
2.5 Pharmacy staff	Yes	54	4.20	.939	.128						
provides good service.	No	157	3.84	.923	.074						
2.7 Pharmacy staff is qualified and knowledgeable.	Yes	54	4.41	.765	.104						
	No	157	4.03	.964	.077						
2.19 Medicine has a	Yes	54	4.80	.528	.072						
good labelling with indication and dosage.	No	157	4.56	.673	.054						
2.22 In-store is clean	Yes	54	4.76	.473	.064						
and light.	No	157	4.55	.655	.052						

independent Samples Test											
		Levene's Equality Variance	of		84	t-test	for Equality of	f Means			
	Z		5		)	Sig. (2-	Mean	Std. Error	95 Confi Interva Diffe	dence 1 of the	
		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
2.5 Pharmacy staff provides good service.	Equal variances assumed	.006	.939	2.481	209	.014	.363	.146	.074	.651	
	Equal variances not assumed		8	2.460	90.689	.016	.363	.148	.070	.656	
2.7 Pharmacy staff is qualified and knowledgeable.	Equal variances assumed	4.448	.036	2.595	209	.010	.376	.145	.090	.661	
	Equal variances not assumed			2.901	114.952	.004	.376	.129	.119	.632	
2.19 Medicine has a good labelling with indication and	Equal variances assumed	15.195	.000	2.338	209	.020	.236	.101	.037	.435	
dosage.	Equal variances not assumed			2.629	116.514	.010	.236	.090	.058	.413	
2.22 In-store is clean and light.	Equal variances assumed	16.007	.000	2.184	209	.030	.211	.097	.021	.402	
	Equal variances not assumed			2.550	127.064	.012	.211	.083	.047	.376	

#### Independent Samples Test

## 4.3.7 Purchasing a prescription medicine or chronic medicine

There are significantly different mean scores between respondents who have to purchase a prescription medicine or chronic medicine and respondents who have not for these factors; Pharmacist provides good counseling, Pharmacy staff provides good service, Pharmacy staff always has a smiling face, Location of pharmacy is close to home or work place, Location of pharmacy is close to hospital, Location of pharmacy is close to market or shopping mall, Price of medicine can be negotiated, Medicine has wide variety, Medicines from reputable brands and In-store has the air-conditioning. The mean is always higher for those with a prescription or chronic medicine.

Table 4.14 Difference between	Purchasing a	chronic	medicine gro	oup

	Group Statistics				
	1.7 Do you have to purchase a prescription medicine/chronic medicine from a pharmacy for yourself or for family member?	N	Mean	Std. Deviation	Std. Error Mean
2.1 Pharmacist provides	Yes	89	4.55	.691	.073
good counseling.	No	122	4.29	.867	.078
2.5 Pharmacy staff	Yes	89	4.12	.809	.086
provides good service.	No	122	3.80	1.004	.091
2.6 Pharmacy staff always	Yes	89	4.25	.830	.088
has a smiling face.	No	122	3.91	.971	.088
2.9 Location of pharmacy	Yes	89	4.31	.937	.099
is close to home or work place.	No	122	4.04	1.016	.092
2.10 Location of	Yes	89	3.17	1.180	.125
pharmacy is close to hospital.	No	122	2.83	1.197	.108
2.12 Location of	Yes	89	3.88	1.146	.122
pharmacy is close market or shopping mall.	No	122	3.46	1.151	.104
2.14 Price of medicine is	Yes	89	4.13	1.047	.111
cheaper than others.	No	122	3.70	1.198	.108
2.15 Price of medicine can	Yes	89	3.25	1.218	.129
be negotiated.	No	122	2.65	1.329	.120
2.20 Medicine has wide	Yes	89	4.49	.785	.083
variety.	No	122	4.26	.851	.077
2.21 Medicines from	Yes	89	4.48	.725	.077
reputable brands.	No	122	4.11	1.003	.091
2.24 In-store has the air-	Yes	89	4.18	.899	.095
conditioning.	No	122	3.63	1.180	.107

Independent Samples Test

		Equality	Levene's Test for Equality of Variances t-test for Equality of Means							
			-		Sig. (2- Mean Std. E		Std. Error		dence 1 of the	
		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper
2.1 Pharmacist provides good counseling.	Equal variances assumed Equal variances not assumed	10.187	.002	2.371 2.456	209 207.323	.019 .015	.264 .264	.111 .107	.044 .052	.483
2.5 Pharmacy staff provides good service.	Equal variances assumed Equal variances not assumed	5.148	.024	2.543 2.629	209 206.858	.012	.329 .329	.129	.074	.583 .575
2.6 Pharmacy staff always has a smiling face.	Equal variances assumed	.456	.500	2.648	209	.009	.337	.127	.086	.589
a smining face.	Equal variances not assumed			2.714	203.750	.007	.337	.124	.092	.582
2.9 Location of pharmacy is close to home	Equal variances assumed	.037	.847	1.997	209	.047	.274	.137	.003	.544
or work place.	Equal variances not assumed			2.022	197.845	.045	.274	.135	.007	.540
2.10 Location of pharmacy is close to	Equal variances assumed	.051	.822	2.054	209	.041	.341	.166	.014	.668
hospital.	Equal variances not assumed			2.059	191.336	.041	.341	.165	.014	.667
2.12 Location of pharmacy is close market or shopping mall.	Equal variances assumed Equal	.164	.686	2.606 2.607	209	.010	.417	.160	.102	.733
	variances not assumed		007							
2.14 Price of medicine is cheaper than	Equal variances assumed	4.409	.037	2.764	209	.006	.438	.158	.126	.751
others.	Equal variances not assumed		28	2.823	202.273	.005	.438	.155	.132	.744
2.15 Price of medicine can be negotiated.	Equal variances assumed	3.317	.070	3.351	209	.001	.600	.179	.247	.952
	Equal variances not assumed			3.397	198.422	.001	.600	.177	.252	.948
2.20 Medicine has wide variety.	Equal variances assumed Equal variances not	.996	.319	2.021 2.047	209 197.797	.045	.232 .232	.115 .113	.006	.458 .456
2.21 Medicines from reputable	assumed Equal variances	5.101	.025	3.015	209	.003	.377	.125	.130	.623
brands.	assumed Equal variances not assumed			3.167	208.988	.002	.377	.119	.142	.611
2.24 In-store has the air- conditioning.	Equal variances assumed	9.777	.002	3.676	209	.000	.549	.149	.254	.843
	Equal variances not assumed			3.833	208.579	.000	.549	.143	.266	.831

#### 4.3.8 Frequency of pharmacy visits

There are significantly different mean scores between respondents who have pharmacy visit 5-6 times/year and respondents who have pharmacy visit more than 12 times/year for these factors; Location of pharmacy is close to hospital and Location of pharmacy is close to market or shopping mall.

There are significantly different mean scores between respondents who have pharmacy visit 7-12 times/year and respondents who have pharmacy visit more than 12 times/year for these factors; Location of pharmacy is close to market or shopping mall, Price of medicine is cheaper than others and price of medicine is competitive.

There are significantly different mean scores between respondents who have pharmacy visit less or equal to 4 times/year and who have pharmacy visit 7-12 times/year for these factors; Price of medicine is cheaper than others and Price of medicine is competitive.



Dependent Variable	(I) 1.8 How often you visit a	(J) 1.8 How often you visit a pharmacy?	Mean Difference	Std.			nfidence rval
	pharmacy?	(ion a pharmacy)	(I-J)	Error	Sig.	Lower	Upper
2.10 Location of	Less or equal to 4	5-6 times/year	179	.201	1.000	72	.36
pharmacy is close	times/year	7-12 times/year	053	.230	1.000	67	.56
to hospital.		More than 12 times/year	.562	.271	.238	16	1.28
	5-6 times/year	Less or equal to 4	.179	.201	1.000	36	.72
		times/year					
		7-12 times/year	.126	.224	1.000	47	.72
		More than 12 times/year	.741*	.266	.035	.03	1.45
	7-12 times/year	Less or equal to 4 times/year	.053	.230	1.000	56	.67
		5-6 times/year	126	.224	1.000	72	.47
		More than 12 times/year	.615	.289	.206	15	1.38
	More than 12	Less or equal to 4	562	.271	.238	-1.28	.16
	times/year	times/year	.502	.271	.230	1.20	.10
		5-6 times/year	741*	.266	.035	-1.45	03
		7-12 times/year	615	.289	.206	-1.38	.15
2.12 Location of	Less or equal to 4	5-6 times/year	245	.194	1.000	76	.27
pharmacy is close	times/year	7-12 times/year	373	.221	.558	96	.22
market or shopping mall.		More than 12 times/year	.538	.261	.241	16	1.23
	5-6 times/year	Less or equal to 4	.245	.194	1.000	27	.76
		times/year					
		7-12 times/year	127	.215	1.000	70	.45
		More than 12 times/year	.784*	.256	.015	.10	1.47
	7-12 times/year	Less or equal to 4	.373	.221	.558	22	.96
		times/year 5-6 times/year	.127	.215	1.000	45	.70
		More than 12 times/year	.911*	.215	.007	.17	1.65
	More than 12	Less or equal to 4	538	.261	.241	-1.23	.16
	times/year	times/year	338	.201	.241	-1.25	.10
		5-6 times/year	784*	.256	.015	-1.47	10
		7-12 times/year	911*	.277	.007	-1.65	17
2.14 Price of	Less or equal to 4	5-6 times/year	302	.192	.707	81	.21
medicine is cheaper	times/year	7-12 times/year	703*	.219	.009	-1.29	12
than others.		More than 12 times/year	.038	.259	1.000	65	.73
	5-6 times/year	Less or equal to 4	.302	.192	.707	21	.81
		times/year					
		7-12 times/year	401	.214	.372	97	.17
		More than 12 times/year	.340	.254	1.000	34	1.02
	7-12 times/year	Less or equal to 4	.703*	.219	.009	.12	1.29
		times/year 5-6 times/year	.401	.214	.372	17	.97
		More than 12 times/year	.741*	.275	.046	.01	1.47
	More than 12	Less or equal to 4	038	.259	1.000	73	.65
	times/year	times/year	050	.237	1.000	15	.05
		5-6 times/year	340	.254	1.000	-1.02	.34
		7-12 times/year	741*	.275	.046	-1.47	01
2.17 Price of	Less or equal to 4	5-6 times/year	333	.166	.281	78	.11
medicine is	times/year	7-12 times/year	581*	.190	.015	-1.09	08
competitive.		More than 12 times/year	.189	.224	1.000	41	.79
	5-6 times/year	Less or equal to 4	.333	.166	.281	11	.78
	-	times/year					
		7-12 times/year	248	.185	1.000	74	.24
		More than 12 times/year	.522	.220	.112	06	1.11
	7-12 times/year	Less or equal to 4	.581*	.190	.015	.08	1.09
		times/year 5-6 times/year	.248	.185	1.000	24	.74
		-	.248 .770 <sup>*</sup>		.009		
	More then 12	More than 12 times/year		.238		.14	1.41
	More than 12 times/year	Less or equal to 4 times/year	189	.224	1.000	79	.41
		5-6 times/year	522	.220	.112	-1.11	.06

# Table 4.15 Difference between Frequency of pharmacy visit group

\*. The mean difference is significant at the 0.05 level.

## 4.4 Difference between groups for the factors

#### 4.4.1 Gender

There are significant different mean scores between male and female for these factors: Pharmacist, Price and Medicine. In all cases women assign higher values to these items on average than men.

**Table 4.16 Difference between Genders on factors** 

Group Statistics										
	1.1 Sex	N	Mean	Std. Deviation	Std. Error Mean					
Pharmacist	Male	86	4.1773	.63578	.06856					
	Female	125	4.3880	.60862	.05444					
Price	Male	86	3.5320	.84523	.09114					
	Female	125	3.9080	.77416	.06924					
Medicine	Male	86	4.2209	.69707	.07517					
	Female	125	4.5800	.52709	.04714					

		0		Indepen	dent Sample	s Test				
		for Equ	e's Test ality of ances	Â	B.	t-test	for Equality of	Means		
						Mean	Std. Error	Interva	nfidence l of the rence	
		F	Sig.	t	df	Sig. (2- tailed)	Difference	Difference	Lower	Upper
Pharmacist	Equal variances assumed	.032	.858	-2.426	209	.016	21067	.08684	38186	03949
	Equal variances not assumed			-2.407	177.581	.017	21067	.08754	38343	03792
Price	Equal variances assumed	1.437	.232	-3.339	209	.001	37602	.11262	59803	15402
	Equal variances not assumed	6		-3.285	172.129	.001	37602	.11446	60195	15009
Medicine	Equal variances assumed	8.461	.004	-4.257	209	.000	35907	.08435	52535	19279
	Equal variances not assumed			-4.047	149.200	.000	35907	.08873	53440	18374

#### 4.4.2 Age

There is no factor that mean scores are significantly different among

groups.

## **4.4.3 Income**

There is no factor that mean scores are significantly different among groups.

#### 4.4.4 Education

There is no factor that mean scores are significantly different among groups.

#### 4.4.5 Living with children below 18 yr.

There is no factor that mean scores are significantly different among

groups.

## 4.4.6 Taking care of children below 12 yr.

There are significant different mean scores between respondents who have to take care of children below 12 yr. and respondents who have not for one factor: Pharmacy staff.

#### Table 4.17 Difference between Taking care of children group on factors

Group Statistics									
1.6 Do you have to take					Std.				
care of children below	care of children below 12			Std.	Error				
years old?		Ν	Mean	Deviation	Mean				
PharmacyStaff	Yes	54	4.0046	.80607	.10969				
	No	157	3.7293	.78342	.06252				

	15	Tes Equa	ene's t for lity of ances	R	X	t-test	for Equality of I	Means		
						Sig (2	Mean Difference	Std. Error	95% Cor Interval Differ	l of the
		F	Sig.	t	df	Sig. (2- tailed)		Difference	Lower	Upper
PharmacyStaff	Equal variances assumed	.264	.608	2.211	209	.028	.27533	.12451	.02988	.52078
	Equal variances not assumed			2.181	89.813	.032	.27533	.12626	.02449	.52617

Independent Samples Test

#### 4.4.7 Purchasing a prescription medicine or chronic medicine

There are significantly different mean scores between respondents who have to purchase a prescription medicine or chronic medicine and respondents who have not, for these factors: Pharmacy staff, Location, Price, Medicine and In-store environment. In all cases respondents who have to purchase a prescription medicine or chronic medicine assign higher values to these items on average than respondents who have not.

	Group Statistic	s			
	1.7 Do you have to purchase a prescription medicine/chronic medicine from a pharmacy for	N	M	Std.	Std. Error
	yourself or for family member?	N	Mean	Deviation	Mean
PharmacyStaff	Yes	89	3.9691	.72282	.07662
	No	122	3.6762	.82740	.07491
Location	Yes	89	3.5056	.59551	.06312
	No	122	3.3049	.62942	.05699
Price	Yes	89	3.9551	.79822	.08461
	No	122	3.6086	.81311	.07362
Medicine	Yes	89	4.5534	.55962	.05932
	No	122	4.3463	.65905	.05967
InStore	Yes	89	4.4757	.56606	.06000
	No	122	4.2049	.68090	.06165

# Table 4.18 Difference between Purchasing a chronic medicine group on factors

				macp	endent Samp	103 1030				
		Levene for Eq of Vari	uality	4	4	t-test	for Eq <mark>uali</mark> ty of	Means		
								6	Interva	onfidence al of the erence
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Lower	Upper
PharmacyStaff	Equal variances assumed	1.407	.23 7	2.676	209	.008	.29287	.10944	.07712	.50862
	Equal variances not assumed			2.733	202.246	.007	.29287	.10715	.08159	.50415
Location	Equal variances assumed	.036	.85 0	2.340	209	.020	.20070	.08578	.03159	.36981
	Equal variances not assumed	$\leq$	0	2.360	195.466	.019	.20070	.08504	.03299	.36841
Price	Equal variances assumed	.031	.86 0	3.080	209	.002	.34645	.11248	.12471	.56819
	Equal variances not assumed			3.089	191.745	.002	.34645	.11215	.12524	.56766
Medicine	Equal variances assumed	.983	.32 2	2.399	209	.017	.20706	.08631	.03691	.37720
	Equal variances not assumed			2.461	204.160	.015	.20706	.08414	.04117	.37295
InStore	Equal variances assumed	3.468	.06 4	3.058	209	.003	.27074	.08853	.09621	.44527
	Equal variances not assumed			3.147	205.392	.002	.27074	.08603	.10113	.44035

Independent Samples Test

# 4.4.8 Frequency of pharmacy visits

There are significantly different mean scores between respondents who have pharmacy visit 7-12 times/year and respondents who have pharmacy visit less or equal to 4 times/ear and more than 12 times/year for one factor; Price.

Table 4.19 Difference between Frequency of pharmacy visit group on factors

Multiple Comparisons

Dependent Variable	(I) 1.8 How often you visit a pharmacy?	(J) 1.8 How often you visit a pharmacy?				2010 00	nfidence rval
			Mean Difference (I- J)	Std. Error	Sig.	Lower Bound	Upper Bound
Price	Less or equal to 4	5-6 times/year	16117	.13730	1.000	5269	.2046
	times/year	7-12 times/year	44188*	.15662	.031	8591	0247
		More than 12 times/year	.11923	.18492	1.000	3734	.6118
	5-6 times/year	Less or equal to 4 times/year	.16117	.13730	1.000	2046	.5269
		7-12 times/year	28071	.15268	.404	6874	.1260
		More than 12 times/year	.28041	.18159	.744	2033	.7641
	7-12 times/year	Less or equal to 4 times/year	.44188*	.15662	.031	.0247	.8591
		5-6 times/year	.28071	.15268	.404	1260	.6874
		More than 12 times/year	.56111*	.19661	.029	.0374	1.0848
	More than 12 times/year	Less or equal to 4 times/year	11923	.18492	1.000	6118	.3734
		5-6 times/year	28041	.1 <mark>815</mark> 9	.744	7641	.2033
		7-12 times/year	56111*	.19 <mark>661</mark>	.029	1.0848	0374

\*. The mean difference is significant at the 0.05 level.

# **4.5 Correlation between factors**

There are six factors that can be matched into fifteen pairs. The pair of factors of Price and Medicine has a moderate positive correlation. Other pairs have a weak positive correlation. Only the pair of Pharmacist and Location has no significant correlation.

		(	Correlations				
		Pharmacist	Pharmacy Staff	Location	Price	Medicine	InStore
Pharmacist	Pearson	1	.439**	.118	.380**	.447**	.248**
	Correlation Sig. (2- tailed)		.000	.087	.000	.000	.000
	Ν	211	211	211	211	211	211
PharmacyStaff	Pearson Correlation	.439**	1	.202**	.332**	.294**	.324**
	Sig. (2- tailed)	.000		.003	.000	.000	.000
	Ν	211	211	211	211	211	211
Location	Pearson	.118	.202**	1	.359**	.182**	.343**
	Correlation Sig. (2- tailed)	.087	.003	1	.000	.008	.000
	N	211	211	211	211	211	211
Price	Pearson Correlation	.380**	.332**	.359**	1	.532**	.278**
	Sig. (2- tailed)	.000	.000	.000		.000	.000
	Ν	211	211	211	211	211	211
Medicine	Pearson Correlation	.447**	.294**	.182**	.532**	1	.408**
	Sig. (2- tailed)	.000	.000	.008	.000		.000
	N	211	211	211	211	211	211
InStore	Pearson Correlation	.248**	.324**	.343**	.278**	.408**	1
	Sig. (2- tailed)	.000	.000	.000	.000	.000	
	N	211	211	211	211	211	211

#### **Table 4.20 Correlation between factors**

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

# **4.6 Potential groups**

#### 4.6.1 Taking care of children below 12 yr.

For the respondents who have to take care of children below 12 yr., the percentage of the respondents who have pharmacy visit 7-12 times/year and more than 12 times/year are 27.8% and 18.5% respectively. Comparing with the respondents who have not, the percentage of respondents who have pharmacy visit 7-12 times/year and more than 12 times/year are 19.1% and 10.8% respectively.

		1.8 How often you visi	t a pharmacy?			
1.6 Do y	ou have to	take care of children below 12 years			Valid	Cumulative
old?			Frequency	Percent	Percent	Percent
Ye	s Valid	Less or equal to 4 times/year	13	24.1	24.1	24.1
		5-6 times/year	16	29.6	29.6	53.7
		7-12 times/year	15	27.8	27.8	81.5
		More than 12 times/year	10	18.5	18.5	100.0
		Total	54	100.0	100.0	
No	Valid	Less or equal to 4 times/year	52	33.1	33.1	33.1
		5-6 times/year	58	36.9	36.9	70.1
		7-12 times/year	30	19.1	19.1	89.2
		More than 12 times/year	17	10.8	10.8	100.0
		Total	157	100.0	100.0	

Table 4.21 Frequency of pharmacy visit in Taking care of children group

The most important factor for the respondents who have to take care of children below 12 yr. is Medicine has a good labelling with indication and dosage (mean score 4.80), closely followed by pharmacist is qualified and knowledgeable (4.76), and the store is clear and light (4.76).



	1				
	N	Min	Max	Mean	Std. Deviation
2.19 Medicine has a good labelling with indication and dosage.	54	3	5	4.80	.528
2.3 Pharmacist is qualified and knowledgeable.	54	2	5	4.76	.581
2.22 In-store is clean and light.	54	3	5	4.76	.473
2.18 Medicine has a long shelf life.	54	1	5	4.67	.801
2.23 In-store medicines are well-organized on the shelf.	54	3	5	4.63	.592
2.2 Pharmacist is available all the time of opening hours.	54	1	5	4.52	.863
2.1 Pharmacist provides good counseling.	54	2	5	4.50	.885
2.16 Price of medicine is standard with clear label or price tag.	54	1	5	4.46	.818
2.7 Pharmacy staff is qualified and knowledgeable.	54	1	5	4.41	.765
2.20 Medicine has wide variety.	54	1	5	4.37	.958
2.9 Location of pharmacy is close to home or work place.	54	1	5	4.30	1.057
2.6 Pharmacy staff always has a smiling face.	54	1	5	4.22	1.003
2.5 Pharmacy staff provides good service.	54	1	5	4.20	.939
2.21 Medicines from reputable brands.	54	1	5	4.13	1.150
2.17 Price of medicine is competitive.	54	1	5	4.07	1.147
2.11 Location of pharmacy has sufficient parking.	54	1	5	4.07	.949
2.14 Price of medicine is cheaper than others.	54	1	5	3.98	1.221
2.4 Pharmacist provides a discussion in consultation area.	54	1	5	3.94	1.220
2.24 In-store has the air-conditioning.	54	1	5	3.76	1.243
2.12 Location of pharmacy is close market or shopping mall.	54	1	5	3.65	1.168
2.8 Pharmacy staff is familiar with me.	54	1	5	3.19	1.415
2.15 Price of medicine can be negotiated.	54	1	5	3.11	1.383
2.10 Location of pharmacy is close to hospital.	54	1	5	3.06	1.220
2.13 Location is important than pharmacist	54	1	5	2.15	1.139
Valid N (listwise)	54				

Table 4.22 Mean score of each factors in Taking care of children group

**Descriptive Statistics**<sup>a</sup>

a. 1.6 Do you have to take care of children below 12 years old? = Yes

## 4.6.2 Purchasing a prescription medicine or chronic medicine

For the respondents who have to purchase a prescription medicine or chronic medicine, the percentage of the respondents who have pharmacy visit 7-12 times/year and more than 12 times/year are 29.2% and 15.7% respectively. Comparing with the

respondents who have not, the percentage of respondents who have pharmacy visit 7-12 times/year and more than 12 times/year are 15.6% and 10.7% respectively.

Table 4.23 Frequence	v of pharmac	v visit in Purchasing	g a chronic medicine group
	, or prove		

1.7 Do vo	ou have t	to purchase a prescription				
		medicine from a pharmacy for yourself			Valid	Cumulative
or for far	nily men	nber?	Frequency	Percent	Percent	Percent
Yes	Valid	Less or equal to 4 times/year	18	20.2	20.2	20.2
		5-6 times/year	31	34.8	34.8	55.1
		7-12 times/year	26	29.2	29.2	84.3
		More than 12 times/year	14	15.7	15.7	100.0
		Total	89	100.0	100.0	
No	Valid	Less or equal to 4 times/year	47	38.5	38.5	38.5
		5-6 times/year	43	35.2	35.2	73.8
		7-12 times/year	19	15.6	15.6	89.3
		More than 12 times/year	13	10.7	10.7	100.0
		Total	122	100.0	100.0	

1.8 How often you visit a pharmacy?

The most important factor for the respondents who have to have to purchase a prescription medicine or chronic medicine is Pharmacist is qualified and knowledgeable (mean score 4.73), closely followed by the medicine has good labelling (4.69), and the store is clear and light (4.69).

	N	Min	Max	Mean	Std. Deviation
2.3 Pharmacist is qualified and knowledgeable.	89	3	5	4.73	.495
2.19 Medicine has a good labelling with indication and dosage.	89	3	5	4.69	.595
2.22 In-store is clean and light.	89	3	5	4.69	.535
2.23 In-store medicines are well-organized on the shelf.	89	3	5	4.56	.656
2.18 Medicine has a long shelf life.	89	1	5	4.55	.798
2.1 Pharmacist provides good counseling.	89	2	5	4.55	.691
2.19 Medicine has wide variety.	89	1	5	4.49	.785
2.21 Medicines from reputable brands.	89	2	5	4.48	.725
2.16 Price of medicine is standard with clear label or price tag.	89	1	5	4.42	.889
2.2 Pharmacist is available all the time of opening hours.	89	1	5	4.37	.884
2.9 Location of pharmacy is close to home or work place.	89	1	5	4.31	.937
2.7 Pharmacy staff is qualified and knowledgeable.	89	2	5	4.27	.902
2.6 Pharmacy staff always has a smiling face.	89	2	5	4.25	.830
2.24 In-store has the air-conditioning.	89	2	5	4.18	.899
2.14 Price of medicine is cheaper than others.	89	1	5	4.13	1.047
2.5 Pharmacy staff provides good service.	89	2	5	4.12	.809
2.11 Location of pharmacy has sufficient parking.	89	1	5	4.02	1.087
2.17 Price of medicine is competitive.	89	1	5	4.02	1.055
2.4 Pharmacist provides a discussion in consultation area.	89	1	5	3.90	1.118
2.12 Location of pharmacy is close market or shopping mall.	89	1	5	3.88	1.146
2.15 Price of medicine can be negotiated.	89	1	5	3.25	1.218
2.8 Pharmacy staff is familiar with me.	89	1	5	3.24	1.187
2.10 Location of pharmacy is close to hospital.	89	1	5	3.17	1.180
2.13 Location is important than pharmacist	89	1	5	2.15	1.144
Valid N (listwise)	89				

 Table 4.24 Mean score of each factors in Purchasing a chronic medicine group

 Descriptive Statistics<sup>a</sup>

a. 1.7 Do you have to purchase a prescription medicine/chronic medicine from a pharmacy for yourself or for family member? = Yes

# CHAPTER V CONCLUSIONS

# **5.1 Conclusion**

The top three ranked factors for consumers in Bangkok to select pharmacies that are very important are Medicine, In-store environment and Pharmacist, respectively. The most important factor of Medicine is a having good labelling with clear indication and dosage. Others factors like long shelf life, wide variety and reputable brands are also very important. For the in-store environment factor, a clean and light store is the most important item and in-store medicines are well-organized on the shelf is very important. But the store having air-conditioning is only somewhat important. Regarding the Pharmacist factor, the store having a pharmacist with qualifications and knowledge is the most important. Availability all the time of opening hours and providing good counseling is important too. But discussion in a private consultation area is only somewhat important.

There are some factors that are significantly different between gender, age and education groups. But there is no factor that is significantly different in the income groups. The factors that are significantly different in the gender group are Pharmacist, Price and Medicine, with women assigning higher importance to all of those factors. But there is no factor that is significantly different in age groups, income groups and education groups.

Respondents who take care of children below 12 yr. and respondents who have to purchase a prescription or a chronic medicine make pharmacy visits more often than other groups. For respondents who take care of children below 12 yr., the top three important factors for selecting a pharmacy are Medicine has a good labelling with indication and dosage, Pharmacist is qualified and knowledgeable and In-store is clean and light. For respondents who purchase a prescription or a chronic medicine, the top three important factors are Pharmacist is qualified and knowledgeable, Medicine has a good labelling with indication and dosage, and In-store is clean and light.

# **5.2 Recommendations**

The result shows that location is not the most important factor for consumers when selecting a particular pharmacy. Pharmacy owners or people who are interested in opening their own modern pharmacies can be more competitive by improving their medicines (labelling), in-store environment and pharmacist services.

# **5.3 Limitation and Future Research**

This study used an online survey to collect data because of time limitations. Then the respondents are limited to people who are able to access the internet. And as the questionnaire is distributed among some group of people with a convenience sampling approach, not necessarily every group of people in Bangkok is well represented. For age group, most of respondents are early and middle aged adults. For income group, most of them are middle and high income. And for education group, most of them are middle and high education. So the sample may not well represent the whole population of people in Bangkok. For the future research, the researcher can focus on the specific group of customers according to pharmacy type such as chain pharmacy, pharmacy in shopping mall, or community pharmacy.

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## **Appendix A: Questionaire**

The survey questions are provided as below:

## Part 1: Demographic

- 1. Gender
  - o Male
  - o Female
- 2. Age
  - o 17 23
  - o 24 39
  - o 40 59
  - o Above 60
- 3. Income (THB/ month)
  - No income
  - o Below 25,000
  - o 25,000 100,000
  - o Above 100,000
- 4. Education (the highest level that you already graduated)
  - Below or equivalent to High School
  - o Diploma/ Bachelor's degree
  - o Master's degree/ Doctoral degree
- 5. Do you have children living in your house?
  - o Yes
  - o No
- 6. Do you have to take care of children below 12 years old?
  - o Yes
  - o No

7. Do you have to purchase a prescription medicine/chronic medicine from a pharmacy for yourself or for family member?

- o Yes
- o No
- 8. How often do you visit a pharmacy?
  - Less or equal to 4 times/year

- $\circ$  5 6 times/year
- $\circ$  7 12 times/year
- More than 12 times/year

# Part 2: Factors influencing on consumer selection of a pharmacy

Please rate the level of importance for each factor when selecting a particular pharmacy by using the scale from 1 to 5. (1 = Not at all important, 2 = Not very important, 3 = Somewhat important, 4 = Very important and 5 = Extremely important)

Factors for selecting a particular pharmacy	Lev	velo	f imp	orta	nce
Factors for selecting a particular pharmacy	1	2	3	4	5
1. Pharmacist provides good counseling.					
2. Pharmacist is available all the time of opening hours.					
3. Pharmacist is qualified and knowledgeable.					
4. Pharmacist provides a discussion in consultation area.					
5. Pharmacy staff provides good service.					
6. Pharmacy staff always has a smiling face.					
7. Pharmacy staff is qualified and knowledgeable.					
8. Pharmacy staff is familiar with me.					
9. Location of pharmacy is close to home or work place.					
10. Location of pharmacy is close to hospital.					
11. Location of pharmacy has sufficient parking.					
12. Location of pharmacy is close market or shopping mall.	5				
13. Usually I travel a bit further from home or work to go to the					
pharmacy that offers the best advice and service, rather than the					
closest one					
14. Price of medicine is cheaper than others					
15. Price of medicine can be negotiated.					
16. Price of medicine is standard with clear label or price tag.					
17. Price of medicine is competitive.					
18. Medicine has a long shelf life.					
19. Medicine has a good labelling with indication and dosage.					
20. Medicine has wide variety.					
21. Medicines from reputable brands.					
22. In-store is clean and light.					
23. In-store medicines are well-organized on the shelf.					
24. In-store has the air-conditioning					