CHAPTER III

Methodology

This chapter discussed methodological issues related to the study. The discussion included specific research methods applied in the study and had been organized into four sections. Section one described the objectives of the research. Section two discussed specific research questiond posed to fulfill the objectives. Section three demonstrated research design and rationale, definition of variables and their operationalization, data sampling, data collection and, finally, data analysis.

3.1 Research Design

In this study, we measured consumer perceived importance of each store attributes for their most frequently visited drug store. Within the scope of attributes defined in this study, which were product assortment, value for money, product quality, store facility, service, advertising & promotion, and influence from reference groups; causal relationship to the degree of store choice decision will be identified. We proposed that each attribute had direct effect on consumers' response towards drug store, at different degree. At the same time, consumer's buying purpose affected the significance of certain attributes, causing the decision equation to change. In order to answer research questions stated earlier, the study was conducted in Bangkok, Thailand.

This study was a surver research. It was designed to be a randomized, quantitative, descriptive research using self-administered questionnaire as major tool. Attributes were identified through literature review and validated through the

questionnaire pilot testing process. Questions used in the questionnaire Questionnaire were tested for clarity of questions, using preliminary pilot copy test, and then validated before being used in the survey through three more pilot test with corrective adaptation based on the reliability and validity analysis. Data was collected by one-to-one interception at a neutral location, avoiding known preference to specific store characeteristics with random mixture of samples. In such circumstances, exhibition center, having its on going health related exhibition activity, was selected, with the rationale that people came to the exhibition at random and, since no drug store was presence at the exhibition, there was no bias of the group being prone to shop at certain type or characterisitcs of drug store. A small reward was offered for respondents to motivate response and participation.

3.2 Samples

3.2.1 Sample Size

This sample size was calculated from the basis of exceeding minimum requirement for the statistical method used in the study with reference to Hair, 1998, as stated below.

- An appropriate requirement of 10-15 respondents per parameter, considering the possibility to deviate from normality in Structural Equation Modeling (SEM). In such instance, sample size should be 90 – 135.

- A generally accepted minimum sample size to ensure appropriate use of MLE was 100-150.

- A sample size of at least 150 for each group was proposed to be the critical sample size for SEM.

The initial aim was to collect samples containing at least 150 samples each, of the two buying purpose namely illness purpose and health purpose in order to obtain high statistical power.

Estimated total target sample of at least 300, fitted well within the generally acceptable size, having the expected size of approximately 150 samples for each buying purpose group as the optimum acceptable number for SEM. However, the major difficulty in collecting the sample was that the nature of data collection was planned to be randomly unbiased without prior knowledge of the respondents' buying purpose, the number of sample obtained might not be exactly equal between group and could vary in their relative proportion. However, number of samples collected was initially monitored to obtain the least optimum size required in each group of buying purpose.

3.2.2 Sampling Method

Data for this study was collected in Bangkok, Thailand. Since Thai retail pharmaceutical market was developing and changing with multinational brand dominantly intruding the market. Bangkok was a place where we could experience a clear mixture of chain stores and the majority number of independently popular drug stores. It also represented a typical Asian type of drug stores market. Data was collected from convenient sampling of people visiting health related event at the national convention center in Bangkok. Although the sample selection was limited only to Bangkok, there was rationale behind such selection. Bangkok was the place where full competition of different drug store format took place. People were easily exposed to these different formats and were able to response to questions asked in the questionnaire. By the way, the drug store market in all other cities, ranking from the

big cities to even more remote cities normally evolved in a way that mimicked the trend starting from Bangkok. Hence Bangkok could be used as a model to represent full market development in Thailand. We, therefore selected Bangkok as the prototype city of this study. Researcher an research assistants walked the floor of the national convention center where there were activities going on. Intercepted prospects were asked to fill the questionnaire by themselves, with little help from the research assistants.

3.2.3 Survey tools

Self-administered questionnaire was developed using questions that represented the meaning of each attributes derived from previous empirical researches (Lockshin, Spawton, Macintosh, 1997, J.Swait, J.C. Sweeney 2000, Yoon, Fuffey, Kijewski, 1993, Sharma, Stafford, 2000, V.W.Mitchell, 2001) together with surveyed perception on store attributes from the focus group. Each questionnaire contained four parts, buying pattern, perception of each attribute upon use, overall attitude and intention to choose, and demographic data. Questions used to measure perception towards each attribute were adapted from scale used by Robert F. Kelly and Ronald Stephenson, 1967.

Measurement for questions used was a mixture of freehand, multiple-choice, categorical scale and Likert scale based upon the nature of that question. Questions on shopping pattern were multiple choices with the definition-labeled choices for answers. Measurement of consumer perception upon the questions representing store attributes were developed by the application of elements and different dimension of Likert scale as shown in Table 1. Each question used to represent an attribute received equal weight for final score calculation of the attribute. Data on

demographic was collected in categorical format and was answered by freehand except for the education, profession and personal income level, which was designed to be multiple-choice checking for ease of definition identification. Question on personal income was also in multiple-choice format to provide respondents with a comfortable space to answer, with ease of mind to put in the figure for the answer, as most people are reluctant to review personal income.

3.2.4 Data collection procedure

Pretest

Copy test

Preliminary data was collected in three rounds from three difference varieties of samples using one-to-one assisted administration of questionnaire. Samples were recruited in convenience manner, as the purpose of the pre-test study was to test the clarity of the questionnaire and ensured its validity. The first group of testing was done with 12 PhD candidates at Chulalongkorn University. The second test was done with a group of 15 office workers. The third test was done with a mixture of 9 PhD candidates and 10 office workers.

After the each round of pilot copy test, result was analyzed focusing on respondents understanding of the language used for the questions. Reliability was also checked and the questionnaire was fine-tuned after each pilot test until the reliability score improved to acceptable level, finally. At the third test, The Croanbach alpha value for questionnaire representing each attributes yielded more than 0.8.

Pilot Test

Once all questions in the questionnaire had been tested and modified via copy test and confirmed by preliminary reliability check. Pilot test was conducted with bigger group of sample using the procedure similar to the plan for main study, with the aim to collect at least 30 samples per group. All three pilot tests were executed one after another. Sample used varied in convenient manner. The first group of samples for pilot test contains 79 respondents who were attendants of a health seminar, which contains general public and university students. The second test was collected people visiting OPD of a major hospital. Fourty nine samples were collected in this second test. Officer workers from different business industries were selected as the third group of test respondents, of which 38 responses were obtained.

Main Study

Data was collected from people visiting the Health Beauty and Spa exhibition at the National Convention Center, in Bangkok, using one-to-one interception method. Prospects were randomly selected from walk-in audiences, who were asked to fill up the questionnaire with some help of research assistance. Research assistance were recruited from fifth year students of the Faculty of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand. A total number of 777 questionnaires were collected.

3.2.5 Subjects

Demographic characteristics of the subject

Demographic analysis of the data, by the use of ANOVA and Chi-square (Mann-Whitney U, Wilcoxon W), showed that there was no different in the age, number of drug store used for the past 12 months, and the frequency of visit to the respondent's regular drug store between the two groups, while the amount of money

and time spent per visit to the drug store were significantly different between the two groups. Time and money spent per visit tends to be higher in the health purpose group, especially the average amount of money spent per visit was three times higher than the illness purpose group.

3.2.6 Test of independence

Test of independence in demographic characteristics between illness purpose and heath purpose group was perfomed with the result as follow:

Number of drug stores visited to buy goods in the last 12 months

The average number of drug stores used by the consumers of the illness purpose group and health purpose group were 2.95 and 3.26 respectively. The ANOVA test showed that there was no significant difference in the mean number of drug stores used between the two buying purpose groups, at the significant level of *0.05.*

Share of the store regularly buy from

The average percent share of the store that respondents regularly bought from between the illness purpose group and health purpose group were 50.49 and 51.49 percent respectively. The ANOVA test showed that there was no significant difference in the percent share of the store that respondents regularly buy from between the two buying purpose groups, at the significant level of *0.05.*

Frequency of visit to drug store per year

The average frequency of consumers' visit to drug store per year between the illness purpose group and health purpose group are 14.08 and 16.32 times per year respectively. The ANOVA test showed that there was no significant difference in the

frequency of consumers' visit to drug store per year between the two buying purpose groups, at the significant level of *0.05*.

Demographic characteristics	Statistical value	Illness Purpose	Health purpose	Stat Sig. (*p*)
No of Drug stores visited in 12 mths	Mean	2.95	3.26	0.282
	Std. Deviation	2.747	3.983	
	Minimum	1	1	
	Maximum	20	25	
Share of the store regularly buy from	Mean	50.49	51.49	0.737
	Std. Deviation	31.356	32.452	
	Minimum	1	1	
	Maximum	100	100	
Frequency of visit per year	Mean	14.08	16.32	0.053
	Std. Deviation	12.601	14.005	
	Minimum	1	1	
	Maximum	96	72	
Time spent per visit	Mean	11.6	17.89	0.000
	Std. Deviation	8.056	12.137	
	Minimum	1	2	
	Maximum	60	90	
Baht spent per visit	Mean	259.22	662.1	0.000
	Std. Deviation	420.526	621.144	
	Minimum	1	1	
	Maximum	5000	3500	
Age	Mean	30.33	30.78	0.601
	Std. Deviation	9.503	10.148	
	Minimum	12	15	
	Maximum	74	80	
No of family members	Mean	4.56	4.4	0.347
	Std. Deviation	1.944	1.862	
	Minimum	0	1	
	Maximum	17	12	
No of family members buy for	Mean	3.35	3.33	0.913
	Std. Deviation	1.825	1.684	
	Minimum	1	1	
	Maximum	13	10	

Table 1: Demographic characteristics of illness purpose and health purpose groups

Time used per each drug store visit

The average time that consumer spent for each visit to drug store between the illness purpose group and health purpose group were 11.6 and 17.89 minutes per visit respectively. The ANOVA test showed that the mean time consumer spent in each vsit to drug store was significantly higher in the health purpose group over illness group, at the significant level of *0.05*.

Money spent per each drug store visit

The average amount of money that consumer spent on each visit to drug store between the illness purpose group and health purpose group were 259.22 and 662.1 Baht per visit respectively. The ANOVA test showed that the mean amount of money that consumer spent in each visit to drug store was significantly higher in the health purpose group over the illness purpose group, at the significant level of *0.05*.

Age

The average ages of respondents in the two buying purpose groups were 11.6 and 17.89 years old respectively. The ANOVA test showed no significant difference in the average amount of money that consumer spent for each visit to drug store between the two buying purpose groups, at the significant level of *0.05*.

Number of family member

The average numbers of family member in the two buying purpose groups were 4.56 and 4.4 persons respectively. The ANOVA test showed no significant difference in the average numbers of family member between the two buying purpose groups, at the significant level of *0.05*.

Number of family member the person buys drugs and health products for

The average number of family member the person buy drugs and health products for between the illness purpose group and health purpose group, were 3.35 and 3.33 persons respectively. The ANOVA test showed no significant difference in number of family member the person buy drugs and health products for between the two buying purpose groups, at the significant level of *0.05.*

Type of products generally bought

The type of products generally bought in the two groups, identified as drugs for chronic illness, drugs for general illness, vitamins & supplements, skincare cosmetics, health equipment and miscellaneous products, were difference between the illness purpose and health purpose group, according to ANOVA test at significant level of 0.05. Drugs, both for chronic and general illness were significant of higher percentage in the illness purpose group, while vitamins & supplements and skin care cosmetics were significantly higher in the health purpose group. Health equipment and miscellaneous products buying were of no significantly different between the two groups.

Gender

Chi-square test (Pearson & Mann-Whitney U) showed that there was no significant relationship between gender and buying purpose groups ($\chi^2_1 = 109$, p=0.741*)* at the significant level of 0.05. Hence, the illness group and health group were not different in the distribution of male and female in the group.

Type of store

Chi-square test (Pearson & Mann-Whitney U) showed significant relationship, at the level of 0.05, between buying purpose and the use of drug store

near home (χ^2_1 = 17.985, p=0.000), drug store in shopping plaza (χ^2_1 = 19.916, p=0.000), and other type of drug store (χ^2_1 = 13.366, p=0.000), while there was no significant relationship between the buying purpose and the use of drug store near office (χ^2_1 = 0.013, p=0.910) and drug store on the way (χ^2_1 = 0.183, p=0.669). Illness purpose groups demonstrated higher percentage of use in the drug store near home category, while health purpose group showed higher percentage of use in the drug store in shopping plaza and other type of drug store category.

Time of visit

Chi-square test (Pearson & Mann-Whitney U) showed that there was no significant difference in the time of visit to drug store between the two buying purpose groups. Chi-square value of each time of visit interval, which were defined as 5-8 hrs (χ^2_1 = 0.700, p=0.403) , 8-11 hrs. (χ^2_1 = 0.611, p=0.435), 11–14 hrs. (χ^2_1 = 2.329, p=0.127), 14-17 hrs. (χ^2_1 = 2.981, p=0.084), 17-20 hrs. (χ^2_1 = 4.502, p=0.034) , 20-23 hrs. (χ^2_1 = 0.032, p=0.858, and 23-2 hrs (χ^2_1 = 4.157, p=0.041) were not significantly different at the significant level of 0.05, with the exception for the level of period 17-20 hrs. and 23-2 hrs. which showed significant different between the two groups. Mainly the illness group and health group were not different in the time of visit during the day. The exception of period 17-20 hrs demonstrated higher number of people in the illness purpose group, while the period of 23-2 hrs. reviewed higher number of people in the health purpose group, but to a very limited number of samples buying at that time of the day.

Demographic Characteristics of samples			
Demographic Characteristics	**Illness Purpose**	**Health Purpose**	***Stat Sig. (p)***
Gender			
Female	86.90%	85.90%	1.000
Male	13.10%	14.10%	1.000
Type of store			
DS near home	70.70%	53.00%	0.000
DS near office	17.50%	17.10%	0.910
DS in plaza	19.30%	36.00%	0.000
DS on the way	19.20%	17.70%	0.669
Other DS	5.90%	14.60%	0.000
Time of visit			
5-8	2.30%	1.20%	0.403
8-11	10.60%	8.50%	0.435
11-14	15.70%	20.70%	0.127
14-17	17.80%	23.80%	0.084
17-20	63.40%	54.30%	0.034
20-23	8.40%	7.90%	0.858
23-2	0.30%	1.80%	0.042
Education			
Primary school edu	1.60%	1.20%	0.746
Secondary school edu	5.40%	7.30%	0.356
College edu	9.20%	11.60%	0.312
Bachelordegree	68.80%	64.60%	0.813
Master degree	12.90%	12.20%	0.058
Above Master degree	0.70%	2.40%	0.231
Others	0.90%		
Profession			
Student	20.60%	22.00%	0.699
Housewife	5.90%	6.10%	0.934
Retiree	0.30%	0.60%	0.643
Employee	49.50%	50.00%	0.906
Business owner	9.40%	9.10%	0.919
Civil servant	5.90%	6.70%	0.712
Professional	7.00%	5.50%	0.502
Income			
Income less than 5000 /m	11.20%	10.50%	0.798
Income 5001-10000	18.90%	16.70%	0.515
Income 10001-15000	21.40%	19.80%	0.657
Income 15001-20000	11.40%	8.60%	0.321
Income 20001-40000	22.60%	21.00%	0.665
Income 40001-60000	5.80%	9.30%	0.114
Income 60001-80000	1.10%	4.90%	0.001
Income >80000	3.00%	4.90%	0.225

Table 2: Demographic characteristics of illness purpose and health purpose groups (2)

Frequently purchased products (% share)	Statistical value	Illness Purpose	Health purpose	Stat Sig. (*p*)
Drug for chronic ill	Mean	21.58	9.13	0.000
	Std. Deviation	28.069	14.972	
	Minimum	0	0	
	Maximum	100	80	
Drug for general ill	Mean	51.79	21.4	0.000
	Std. Deviation	30.357	20.72	
	Minimum	0	0	
	Maximum	100	90	
Vitamins & Supp	Mean	17.27	40.63	0.000
	Std. Deviation	17.237	26.098	
	Minimum	0	0	
	Maximum	100	100	
Skincare cosmetic	Mean	13.64	29.48	0.000
	Std. Deviation	16.951	26.285	
	Minimum	0	0	
	Maximum	100	100	
Health equipment	Mean	2.68	3.72	0.248
	Std. Deviation	7.86	6.269	
	Minimum	0	0	
	Maximum	70	30	
Others	Mean	2.26	4.14	0.165
	Std. Deviation	8.703	14.975	
	Minimum	0	0	
	Maximum	75	80	

Table 3: Products generally bought from frequently visited drug store

Education

Chi-square test (Pearson & Mann-Whitney U) showed that there was no significant difference of the education levels of respondents in the two buying purpose groups. Chi-square value of each education level, which were defined as primary school ($\chi^2_1 = 0.105$, p=0.745) , secondary school ($\chi^2_1 = 0.854$, p=0.355) , College ($\chi^2_1 = 0.801$, p=0.371), bachelor degree ($\chi^2_1 = 1.023$, p=0.312) , master degree ($\chi^2_1 = 0.056$, p=0.813) , above master degree ($\chi^2_1 = 3.611$, p=0.057) , others

($\chi^2_1 = 1.438$, p=0.230) were not significantly different at the significant level of 0.05. Hence, the illness group and health group were not different in the mix of education level in the group.

Occupation

Chi-square test (Pearson & Mann-Whitney U) showed that there was no significant difference of the occupation mix between the two buying purpose groups. Chi-square value of each type of occupation, which were defined as student (χ^2_1 = 150, p=0.698) ,housewife (χ^2_1 = 0.007, p=0.934) , retiree (χ^2_1 = 215, p=0.643), employee(χ^2_1 = 0.014, p=0.906) , business owner(χ^2_1 = 0.010, p=0.919) , civil servant(χ^2_1 = 0.137, p=0.711) , professional (χ^2_1 = 0.451, p=0.502) were not significantly different at the significant level of 0.05. Hence, the illness group and health group were not different in the mix of occupation in the group.

Income

Chi-square test (Pearson & Mann-Whitney U) showed that there was no significant difference in the distribution of income level between the two buying purpose groups. Chi-square value of each income level, which were defined as less than 5,000 baht per month (χ^2_1 = 0.066, p=0.798) , 5,001-10,000 baht per month (χ^2_1 = 0.424, p=0.515) ,10,001-15,000 baht per month (χ^2_1 = 0.198, p=0.656), 15001-20000 baht per month(χ^2_1 = 0.986, p=0.321) , 20,001-40,000 baht per month (χ^2_1 = 0.188, p=0.665) , 40,001-60,000 baht per month (χ^2_1 = 2.497, p=0.114) , 60,001-80,000 baht per month (χ^2_1 = 10.18, p=0.001) and more than 80,000 baht per month (χ^2_1 = 1.473, p=0.225) were not significantly different at the significant level of 0.05, with the only exception for the level of 60,001-80,000 which showed significant different between the two groups, having higher percentage in the health purpose

group. In general, the illness purpose group and health purpose group were not different in the mix of income level in the group. Majority of respondents in both group demonstrated similar income level with the range of 5001-15,000, and 20,001-40,000, supports the insignificant difference of the groups. The different in the level of 60,001-80,000 baht per month reflected the relationship of product characteristic, especially the average price level, in the health purpose category to the income level of users.

Overall test of independence for demographic characteristics between the two buying purpose groups demonstrated that the illness purpose group and health purpose group were not significantly different in their demographic charactertistics. Those characteristics that were found to be different were such behavior or characteristics that reflected the nature of buying purpose and supported that buying purpose of the group, such as type of products frequently bought, time spent per visit and amount of money paid per visit. Since the demographic characteristics were not different, it meant that the result from our further analysis comparing the two groups should be free from the confounding effect of demographic characteristics.

3.3 Operationalization

Product Assortment

Product Assortment was refered to the variety and choices of the products available in the store. Consumer perception on product assortment was measured in terms of the ability to get what was needed, abundance of choices and the availability of difficult to find products.

Effectiveness

Effectiveness was the quality aspect perceived by the consumer as being provided by the store. Such effectiveness were measured in term of the effectiveness of use of the products obtained from the drug store, either it was drug or health promoting non-drug items. Effectiveness were measured directly as the efficacy of drugs and perceived effectiveness from the use of health products.

Reasonable price

The price attribute, hereby to be called as reasonable price, was consumer perception of price reasonableness or relative saving the consumer gets from buying at the store. Since price was a relative judgment, being a comparison of real price and internal expected price, questions used was in relatively self-judged manner. However, there were questions on the thin line that could be evaluated either as promotional discount and the perception of value for money. Final judgement on the grouping of construct was drawn when doing the data analysis via factor analysis.

Store Facility

Elements of in-store environment that composed retail atmosphere in the form of physical feature like design, lighting and layout, ambient features like music and smell, and social feature like the type of clientele, attractive activities that created joyfulness in shopping, could influence consumers' perceptions of stores atmosphere, attitude towards the store and the response towards the store. Consumer perception of store atmosphere was measured in three dimension, general feeling, shopping comfort and social group or clientele identification. Convenience, such as accessibility of the store as well as facilities stores provided for ease of visit, patronage and purchase of goods by the customers was also another aspect of store facility. This dimension was

measured in the term of distance from customer location, easy to find location, the availability of parking place, easy access store layout and walkway, familiarity of merchandise grouping, fast check-out, and credit card acceptance.

Promotion

Promotion focused mainly on sales promotion activities. Such actions included product demonstration, displays, contests, event such as visiting celebrities or opinion leaders and other special activities the store creates.

Service

Store service quality covered service from staff and those additional offerings the store provided for customer. It was seen as a part of today's retail competitiveness, especially in the healthcare set up like a drug store where products offered require high involvement and proper advice was needed, causing patient to usually seek for consultation. Staff service was measured as technical quality and functional quality or the manner given. Availability of pharmacist and Pharmacist's service quality was also another measurement for this construct. Technical service was viewed as the primary service expected from pharmacist and store sales staff.

References

Questions on reference group was operationalized in a straight forward manner, in order to have respondents rate on the level of influence each group of reference have on the respondent. Three reference groups were namely, family, friends and professionals like physician and pharmacist. Apart from the reference group as mentioned above, the recognition of the store from frequently exposed references, such as advertisement, and the actual exposure to the store of the same store name were included as references. Advertising was mainly on marketing

communication to the target prospects and public, either directly or indirectly. Advertising could be range from the classical advertising campaign through mass media to the indirect enhanced exposure of the store name or store brand. A popular method of advertising was to use known feature such as celebreties as the presenter in the advertisement, with the aim to be easily recognized reference for the audience. Another widely exercised indirect advertising in retail was to use the presence of store existence according to the location distribution as one way of advertising. Same store name with clear store identity on the external of the store was the idea for such action. Simple aspect of advertising recognition was put in the questionnaire to test if consumers were attracted to drug store by advertising and frequency of exposure to the same store name or store chain.

Buying purpose

For the purpose of this study, we scoped the buying purpose into the illness-health scenario, being illness purpose and health purpose. Anyway, it was generally known that a multi-task effect did happen in many people. A person might have more than one purpose when visiting a store. In this circumstance, we asked the respondent to rank his or her purpose stating the main purpose and secondary purpose. Buying purpose was grouped according to the respondent's valuation of their primary purpose.

Response towards the drug store

Response towards the drug store included the dimension of attitude and intention to use the drug store. The attitude part was evaluated in terms of overall like or satisfaction with the store, tendency to recommend the stores to other and also the respondents overall attitude towards the store. Intention to come back or use the

drug store was evaluated in two different aspects, the general thought about buying at the drug store, with one of the two specific purposes, the intention to buy product of specific buying purpose, drug and health products in separated question, at the drug store again.

All questions generated were pre-tested with group of prospective sample, in the copy test group. Testing was done in a one-to-one manner to check the comprehension of written language used as well as to confirm the understanding of the intent of the questions. Once the questions passed the initial copy test, full questionnaire was compiled and finalized for further testing in the pilot test.

Attribute		Questions used	Measurement
Product Attribute	1	Always get what I want	Strongly agree to disagree
	2	Wide selection of different kinds of products	
	3	Variety of brands	Likert Scale 7
	4	Good product quality.	
	5	Store brand reputation	
Effectiveness	1	Efficacious drug	Strongly agree to disagree
	2	Effective product	Likert Scale 7
Reasonable Price	1	Inexpensive price	Strongly agree to disagree
	2	Goods are returnable.	
	3	Appropriate price	Likert Scale 7
	4	Price is low	
Store Facility	1	Close by	Strongly agree to disagree
	2	Open everyday	Likert Scale 7
	3	Fast check-out	
	4	Comfortable with the layout	
	5	Parking convenience	
	6	Nice atmosphere	
	7	Clean & organized	
	8	Easy buying layout	
	9	Can pay by credit card	
Service	1	Attentive staff, service with care	Strongly agree to disagree
	2	Staff listens with empathy	

Attribute		Questions used	Measurement
	3	Staff gives clear advice	Likert Scale 7
	4	Knowledgeable staff	
	5	Reliable staff	
	6	Pharmacist on duty	
Promotion	1	Demonstration sample is offered	Strongly agree to disagree
	2	Frequent customer priviledge	
	3	Regular promotion activity	Likert Scale 7
	4	Enjoyable shopping	
References	1	It is the store my family always shops at.	Strongly agree to disagree
	2	Highly recommended by family/friends.	Likert Scale 7
	3	My doctors or known pharmacists recommend.	
	4	Repetitive exposure from store distribution	
	5	Learn from advertising campaign	
Response towards drugstore	1	Overall satisfaction with the store	Like most/dislike most
	2	Shall I recommend the store to others	Definitely Will / Not
	3	Overall attitude towards the store	Like most/dislike most
	4	Will you buy your medicine at this store again	Definitely will / not
	5	Will you shop at this store again	
	6	Will you buy your health products here again	Likert Scale 7

Table 1: Attributes Measurement

3.4 Data Analysis

This part described the rationale and procedures used to analyze the data collected. Statistical analysis programs, SPSS v.11.5 and LISREL 8, were used for the data analysis. The analysis methods used include Descriptive Statistical Analysis, Exploratory Factor Analysis, Test of Reliability, Analysis of Variance (ANOVA), Confirmatory Factor Analysis, and structural equation modeling.

Analysis of the sample characteristics

Descriptive statistical analysis was used to analyze the characteristics of respondents in all of the three dimensions.

In order to compare the demographic characteristics of the sample from each buying purpose group, frequency tables and chi-square test were used. ANOVA was used to compare the buying behavior such as time allowed per visit or amount of money spent per visit.

Analysis of the store attributes and store choice relationship

In order to perform the analysis for causal relationship between perceived importance of store attributes and store choice (RQ1), steps of test through the structural equation analysis was implemented. Diagnostic test on the data, especially the correlation or variance-covariance matrix, and test for multivariate normality and skewness of the data was performed. In order to test the hypothesized relationships among the constructs specified in the conceptual model, a structural equation model was used to specify and test the hypothesized cause-and-effect constructs and thier indicators. Data was initially put into PRELIS2, which was used to generate covariance matrices for use as input for the structural equation modeling analysis. LISREL program was used to analyze Structural Equation Model. Generally, a structural equation model contained two parts, the measurement model and the structural model. The measurement model specified how the latent variables or hypothetical constructs were measured in terms of the observed variable, and it described the measurement properties, namely the validities and reliabilities of the observed variables. The structural equation model specified the causal relationships among the latent variables and describes the causal effects and the amonut of unexplained variance. Structural equation modeling for overall data, and data upon each buying purpose group was performed as initial view. Then the multiple group analysis was performed in order to compare the model for each group and test its

independence. Nested model testing was employed to identify the best fitted model and explain the difference of the two groups according to the hypothesis.

Evaluation for the fit of the result

Examination of offending estimates.

These were estimated coefficients in either the structural or measurement models that exceed acceptable limits.

Overall Model Fit evaluation using Goodness-of-fit measures

- Ratio of 5 to 1 between estimated coefficients and the number of respondents
- Goodness-of-Fit: Absolute fit measures, Incremental fit measures and Parsimonious fit measures
- Measurement Model Fit:
    - Perform unidimensionality test, Cronbach's alpha, on all multiple indicator constructs.
    - Estimate the estimated loadings and assess the statistical significance of each one.
    - Composite reliability: Test of
        - Construct reliability: Indicator reliability should exceed 0.5
        - Variance extracted measure: Value should exceed 0.5
- Structural Model Fit
    - Significance level to be specified at 0.05 due to the statistical property of MLE.
    - Examine correlation values exceeding 0.8

- Comparison of Goodness-of-Fit measures for the Estimated and Competing Models