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The Relative Importance of Store Attributes on Consumers' Responses toward Drugstore: The Moderating Effect of Buying Purposes

อิทธิพลจากรูปแบบคุณลักษณะของร้านยาต่อการตอบกลับมาใช้บริการ: อิทธิพลของตัวแปรกำกับจากวัตถุประสงค์การซื้อ

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A study on people living in the metropolitan area of Thailand, using Bangkok as the model, was conducted for two purposes: to measure the effect of store attributes on consumers' responses toward drugstore, and to determine the moderating effect from two different buying purposes, being identified as illness purpose (buying drugs) and health purpose (buying health promoting products). Structural equation modeling was used for data analysis and comparison of the two buying purposes. Results from the study indicated three major attributes: service (γ_{51}=0.28; p<0.01, one tailed); product assortment (γ11=0.18; p<0.01, one tailed); and price (γ_{21}=0.11; p<0.05, one tailed) to be of significant effects on consumers' responses toward drugstore. Store facility, quality, promotion, and references did not appear to have significant effects upon the responses toward drugstore. Results for the study also demonstrated that the two different buying purposes, did not cause the moderating effects on store attributes affecting consumers' responses toward drugstore. The findings also called for attention to the characteristics of drugstore as a retail store which was different from general retail format. Drugstore managers should focus primarily on service provided to their customers, especially from the store sales staff. Drugstore should carry adequate variety of products that met customer's need and create the image of reasonable price in the customer's mind. Recommendations on the managerial implication in the field of drugstore management was discussed for the development of competitive drugstore strategies and marketing strategies.

Key words : Drugstore, store attributes, buying purposes, moderating effect, consumers' responses.

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กานต์ วงศ์ศุภสวัสดิ์, ฐณัฏฐา กิตติโสภี, สามารถ เผ่าภคะ. อิทธิพลจากรูปแบบคุณลักษณะของร้านยาต่อการตอบรับกลับมาใช้บริการ: อิทธิพลของตัวแปรกำกับจากวัตถุประสงค์การซื้อ วารสารเภสัชกรรมโรงพยาบาล 2008;18(1):10-26.

งานวิจัยนี้ได้ทำการศึกษากับผู้ที่ใช้ชีวิตในเมืองใหญ่ ซึ่งได้ใช้กรุงเทพมหานครเป็นแบบตัวอย่าง โดยมีวัตถุประสงค์เพื่อศึกษาความสำคัญขององค์ประกอบร้านยาที่มีผลต่อการตัดสินใจเลือกใช้ร้านยาโดยผู้บริโภคและศึกษาอิทธิพลจากวัตถุประสงค์การซื้อที่แตกต่างกันสองแบบ คือ ซื้อเพื่อแก้ปัญหาเจ็บป่วย (ซื้อยา) กับซื้อเพื่อสุขภาพ (ซื้อผลิตภัณฑ์สุขภาพ) ด้วยการวิเคราะห์ข้อมูลและเปรียบเทียบโดยใช้ Structural equation model ผลการวิจัยพบว่า องค์ประกอบร้านยาที่มีนัยสำคัญในการส่งอิทธิพลต่อการเลือกใช้ร้านยาคือ การบริการ (γ_{51}=0.28; p<0.01, one tailed) ความหลากหลายของสินค้า (γ_{11}=0.18; p<0.01, one tailed) และราคาที่สมเหตุผล (γ_{21}=0.11; p<0.05, one tailed) สำหรับการตกแต่งและอำนวยความสะดวกในร้าน คุณภาพที่ได้รับ การส่งเสริมการขาย และกลุ่มแนะนำ ไม่มีผลในระดับที่มีนัยสำคัญต่อการเลือกกลับมาใช้บริการที่ร้านยา ในขณะเดียวกันพบว่า วัตถุประสงค์การซื้อที่แตกต่างกันไม่มีอิทธิพลที่จะทำให้องค์ประกอบร้านยาที่ส่งผลต่อการเลือกใช้ร้านยาเปลี่ยนแปลงไป การให้ความสำคัญต่อการให้บริการ การจัดหาผลิตภัณฑ์ให้มีความหลากหลาย และ การตั้งราคาขายที่สมเหตุผล เป็นสามปัจจัยหลักที่ผู้ประกอบการร้านยาควรเอาใจใส่ ก่อนปัจจัยอื่น และควรทำให้รูปแบบของร้านยามีความแตกต่างจากร้านขายปลีกทั่วไป การนำผลจากการวิจัยไปประยุกต์เพื่อสร้างกลยุทธการจัดการร้านยาเพื่อประสิทธิภาพและการแข่งขัน ได้ถูกเสนอแนะไว้ในตอนท้ายของงานวิจัยนี้

คำสำคัญ : ร้านยา องค์ประกอบร้านยา วัตถุประสงค์การซื้อ การเลือกกลับมาใช้บริการ

Introduction

The drugstore market in Thailand is facing a significant challenge from several directions. Competition is not only limited to local competition among drugstores, but also from the retail evolution as well as the intrusion of multinational branded drugstore. In the rapidly changing market, where retail becomes more and more sophisticated, drugstore as a type of retailer is inevitably moving toward and challenging evolution.[1] Competition in retail drugstore is also driven by the globalization effect, presenting the local market with established multinational branded drugstores. Social changes, educations, and lifestyles induced effect on the significance of each attributes a store offered.[2] While most studies in the retailing were studied in grocery, supermarket, or general merchandise store model, the buying of drugs, which requires professional services or advices[3,4] can be of different scenario. Managers, pharmacists, and related pharmacy organizations, working on Thai drugstore setting, largely different from western setting, are looking for effective strategies to cope with the changing market to be able to compete both in the local level as well as coping with in-coming multinational stores.

Objectives

The purpose of this study was to study consumers' responses toward drugstore, with

two separated objectives. The first objective was to understand consumers' perceptions on the significance of store attributes on their responses toward drugstore. Store attributes in the consideration were product assortment, reasonableness of price, effectiveness, store facility, store service, promotion, and references.

The second objective was to examine the moderating effect from buying purposes, being identified as illness purpose and health purpose, on the perceived significance of store attributes on responses toward drugstore. Illness purpose was the purpose to treat and cure illness, leading to buying of drugs, while health purpose was the purpose to promote good health or prevent illness which led to the buying of non-drug items like vitamins, supplements, or skin care products. Results from this study could contribute to the science of pharmaceutical marketing and pharmacy administration in the community drugstore sector, consumer behavior, especially in the competitively changing environment.

Conceptual Framework

The conceptual framework used in this study was derived from the *"Structuralistic Attitude Theory"*. In a consumer behavior perspective, attitude was defined as a learnt predisposition to behave in a consistently favorable or unfavorable way with respect to a given object. The Structuralistic Attitude Theory suggests that an attitude consists of three components: cognitive component, affective component, and action-tendency component or conative component. The cognitive component refers to the knowledge and evaluative belief an individual hold about a product or store. Evaluative belief involves judgments such as good/bad or favorable/unfavorable. The feeling or affective component is referred to the individual's emotional range concerning the object, which can be viewed as a product or store. Affective component involves responses, such as liking/disliking, pleasure/displeasure, or excitement/boredom. The action-tendency component expresses the individual's readiness to behave overtly toward a product or store.[5] Each component contains two characteristics, valence and multiplexity. Valence is a measure of the degree of positivity or negativity of the component. Multiplexity is the measure of the number and variety of elements forming an attitude component. The contemporary view of attitude is demonstrated in Figure 1. From this perspective, attitude is viewed as distinct from its components, with each component

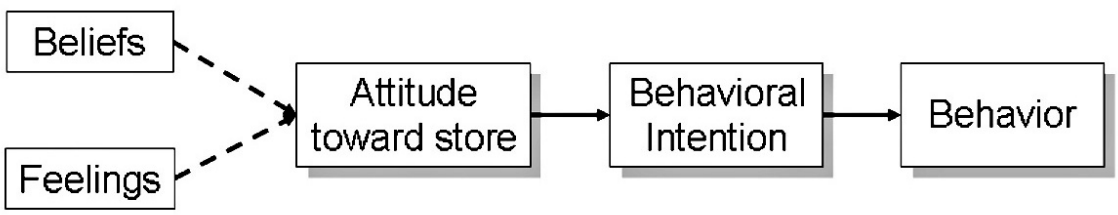

Figure 1. Structuralistic attitude model.[5]

being related to attitude. Both the cognitive component (beliefs/perceptions) and the affective component (feelings) are conceptualized as determinant of attitudes. A person's overall evaluation of an attitude object was seen as being determined by the person's belief and/or feeling about the attitude object.[6] When consumers choose drugstore, consumers use their beliefs/perceptions rather than their feelings about the store to form their attitudes toward the store. Hence, only beliefs/perceptions about the store are included in the conceptual model.

Retail mix represents store attributes, generally described as physical facilities, merchandising, pricing, promotion, service, and personnel created to match consumer expectations.[5] Attribute beliefs positively influenced time spent at the mall, and attribute sensitivity affected patronage profiles.[7] Empirical evidence showed a number of functional and objective attributes as the most important, such as price, product quality, assortment, and location, while the intangible and emotional attributes were store atmosphere, sales personnel, service, promotion and advertising.[8-12] Store image also determines shopping behavior and is based on the individual's experience concerning store attributes,[10,13] of which, the most important components are merchandise-related aspects (quality, price, assortment); service-related aspects (quality in general and salespeople service); and the pleasantness of shopping in the store.[14] Though many studies might be generalizable, they are mainly done in the area of grocery store, supermarket, and shopping mall. Drugstore, being a specialty store that concentrates on health,[2] and a mixture of retailer plus healthcare service provider, with consumers' perceptions of pharmacist in drugstore as their second most reliable source of personal health and well-being resource[15] has not been of much focused for retail marketing research. An integration of these previous findings leads to the conceptual model reflecting the effect ofbuying purposes upon these attributes.

Product assortment, being defined as the abundance of choices of products, preparations, sizes, or variety of brands available in a store, allow consumers to easily find the products they want at relatively low cost of search and comparison.[16] As product assortment was one of the three important drives from consumer's choice between store formats,[17] consumer rated larger assortments as more favorable.[18] Product assortment improved the pleasure of buying, and had positive relationship with store attractiveness.[19] Such concept led to the hypothesis *H1: Product attribute positively affects consumer's response toward frequently used drugstore.*

Price has been recognized and well accepted as one of the attributes in shopping[20] used to attract consumers to a retail store and generate an increased level of store traffic.[21] A consumer's perception of reasonableness led to patronage intention.[22] Researchers' hypothesis was *H2: Price perception positively affects consumer's response toward frequently used drugstore.*

Consumers perceived the quality of a product differently depending on the store type from which the purchase was made.[23] Furthermore, a consumer's perception of the quality of a store's merchandise was related to the patronage of that store.[14,24] Stores perceived as offering effective solution, either for illness or health could easily be viewed by consumer as preferable. The researchers proposed the hypothesis as *H3: Quality positively affects consumer's response toward frequently used drugstore.*

Store facility is composed of two dimensions, the store atmosphere and convenience. The elements of in-store atmosphere were categorized into physical feature like design, lighting and layout, ambient features like music and smell, and social feature like the type of clientele, and employee availability and friendliness.[22] Convenience is referred to as the accessibility of the store as well as facilities store provided for ease of patronage by the customers, e.g. parking, easy access store layout, merchandise grouping, store ambience, cleanliness, and lighting. The researchers hypothesized as *H4: Store facility positively affects consumer's response toward frequently used drugstore.*

Service quality was found to positively affect customer retention.[25,26] The quality of service was classified as *"technical quality"* and *"functional quality"* or the manner given.[27] Five characteristics that customers used to evaluate service quality are *"reliability"*, *"assurance"*, *"tangibility"*, *"empathy"*, and *"responsiveness"*. The researchers proposed *H5: Store service positively affects consumer's response toward frequently used drugstore.*

Promotional activities include visual merchandising, display, personal selling, sales promotion without mass media, and other associated activities. Specialty stores gained most from using price promotion being a strong main effect that could attract customers from other multi-shop shopping strategies, but not from combination stores.[20] The researchers proposed the hypothesis *H6: Promotion induces positive effect on consumer's response toward frequently used drugstore.*

Reference groups could influence consumer's attitude toward the selection of a drugstore. Family, the significant others, e.g. friends, personal doctor, pharmacist, or role model, through various levels of communication, induce and influence an individual to make decision. Advertisement, through creative communication, is a kind of reference in the consumer's mind. Likewise the strategic distribution of stores in nested locations also become reference store by its presence. The researchers proposed *H7: References positively affect consumer's response toward frequently used drugstore.*

Task definition comprised the set of goal a consumer formed to resolve needs deriving from a specific situation,[28] and sensitively affected the attribute importance weight.[29] In this case, the purposes of buying was the task definition. Store choice was differentiated by task definition[30] defined in this study as buying

purposes, which was dichotomously divided into illness purpose and health purpose. Illness purpose represents the purpose of visit to buy medicine to relieve sickness. Health purpose covers the aim of visit to elevate ones health status and maintain good health e.g. to seek for dietary supplements and vitamins. Buying purposes could have effect on store attributes; mainly store facility and convenience, product attributes, price, promotion, references and service were measured. The hypotheses were defined as *H8: The effect of effectiveness, service, and references on consumer's response toward the use of drugstore are stronger in the illness purpose group than the health purpose group,* and *H9: The effect of product assortment, reasonable price, store facility, and promotion on consumer's response toward the use of drugstore are stronger in the illness purpose group than the health purpose group.*

Method

1. Sample and Sampling Procedure. The study was a descriptive survey research, using self-administered questionnaire as a major tool. The questionnaire was tested for clarity of questions, using preliminary pilot copy test, and validated before being used in the survey through three more pilot tests with corrective adaptation based on the reliability and validity analysis. Three rounds of copy test were conducted among targeted pilot group to ensure clarity of questions used in the questionnaire, with modification and fine tuning after each round of test. After the copy tests were satisfactorily modified for best clarification, three pilot tests were conducted using sample from different clusters in Bangkok. The main study was pursued after all tests were conducted and analyzed. As Bangkok was the place where ones could experience full competitive environment with clear mixture of chain stores and the majority number of independently popular drugstores, data were conveniently collected from people visiting health related event at the National Convention Center in Bangkok. The researchers finally got 777 samples of which 738 were usable (94.98 percent). Within the 738 samples, 574 samples had illness purpose as main purpose, and 164 samples having health purpose as the main purpose of buying. The number of samples collect for each group exceeded the minimum targeted set for each group from the beginning of the study, which was set at 150 samples per group.

2. Operationalization. Attributes are defined as product assortment, effectiveness (store quality), price, store facility, promotion, service, and references. Buying purposes: illness and health purposes were operationalized by measuring the category of products, drugs, and non-drugs. Table 1 demonstrated the operationalization.

3. Data Analysis. Descriptive statistical analysis was used to analyze the characteristics of respondents in all of the three dimensions. ANOVA and chi-square test were used to compare the buying behaviors such as time allowed per visit or amount of money spent

Table 1. Attribute measurement

Attribute		Questions Used	Measurement
Product assortment	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
Quality (Effectiveness)	1	Efficacious drug	Strongly agree to disagree
	2	Effective product	Likert Scale 7
Reasonable price	1	Appropriate price	Strongly agree to disagree
	2	Price is low	Likert Scale 7
Store facility	1	Comfortable with the layout	Strongly agree to disagree
	2	Clean & organized	
	3	Easy buying layout	Likert Scale 7
Service	1	Attentive staff, service with care	Strongly agree to disagree
	2	Staff listens with empathy	
	3	Staff gives clear advice	
	4	Knowledgeable staff	Likert Scale 7
	5	Reliable staff	
Promotion	1	Demonstration sample is offered	Strongly agree to disagree
	2	Frequent customer privilege	
	3	Regular promotion activity	
	4	Enjoyable shopping	Likert Scale 7
References	1	Highly recommended by family /friends	Strongly agree to disagree
	2	My doctor or known pharmacist recommend	
	3	Repetitive exposure from store distribution	Likert Scale 7
Response toward drugstore	1	Overall satisfaction with the store	Like most /dislike most
	2	Shall I recommend the store to others	Definitely will / will not
	3	Overall attitude toward the store	Like most / dislike most
	4	Will you buy your medicine at this store again	Definitely will / will not
	5	Will you shop at this store again	Likert Scale 7
	6	Will you buy your health products here again	

per visit. Data were analyzed by confirmatory factor analysis to test and confirm the convergent validity and discriminant validity of each variable. Structural equation model[31] using PRELIS 2,[32] and LISREL[33] programs, was used to specify and test the hypothesized cause-and-effect constructs and their indicators.

From the data collected, illness purpose respondents were 77.8 percent of total samples, and health purpose accounted for the rest, around 3.5 to 1 ratio. In the 77.8 percent of samples with illness purpose as primary objective, 44.6 percent had illness as single purpose, meaning that the only purpose, primary and secondary objectives, to go to a drugstore was to buy drug. On the other hand, the health purpose group contained only 15.9 percent purely for health purpose. Demographic data of the two buying purpose groups were relatively similar. The average *"age and gender"* ratio of the two groups were not significantly different, indicating homogenous and comparable samples. *"Occupation and education"* were also of similar profile in the distribution of each education level, as evaluated by chi-square test. Income

levels were in the same line for both groups, with the exception for yearly income level of US$1,500-2,000 (60,001-80,000 baht), which was found to be significantly higher percentage in the health purpose group. A summary of demographic characteristics was shown in Table 2.

Number of stores visited in 12 months period, frequency of visit to drugstore per year, and share of the regular store the person always visit were similar between the illness purpose group and the health purpose group, indicating similar drugstore usage behaviors of the two groups. Time usage per visit was significantly higher in the health purpose group, which demonstrated the needs to choose or search for products in this category, causing the consumer to take more time than buying drug to remedy sickness. The amount of money spent per visit also reflected the same nature of buying purposes, being higher in the health purpose group due to the higher price of health products when they were compared to generally used medicine. Data of these behavioral characteristics were demonstrated in Table 3.

Results

1. **Measurement Model Results.** The indicator coefficients (i.e., standardized factor loadings), reliabilities, and proportion-of-variance-extracted indices of the constructs in the measurement model were shown in Table 4. The indicator coefficients of the constructs were generally high and statistically significant ($p<0.0005$, one tailed). Reliability levels for the constructs were also relatively high, ranging from 0.8180 to 0.9213. All of them exceeded the threshold of 0.7 recommended by Nunnally.[34]

In overall, it was found that the reliabilities and validities of all the constructs exceeded the minimal standards required, proving that the measurement model contained good convergent validity. It was reasonable to conclude that the measurement model for the overall data containing sample of two different buying purposes had good validity and could be used for further structural model analysis.

Table 5 demonstrated results for the structural model analysis. The GFI, NFI, CFI, and IFI were 0.89, 0.95, 0.97, and 0.97, respectively. The model was adequately fit based on NFI, CFI, and IFI; and marginally fit based on GFI. By all considerations, the model could be accepted as adequately fit. Results obtained from the structural equation, based on natural mix of two main different buying purposes model, analyzed by means of multiple group analysis to obtain the best fit model, supported the researchers' hypothesis that service ($\gamma_{51}=0.28$; $p<0.01$, one tailed); product assortment ($\gamma_{11}=0.18$; $p<0.01$, one tailed); and price ($\gamma_{21}=0.11$; $p>0.05$, one tailed) were significant factors that positively affected the responses toward drugstore, accepting *H5*, *H1*, and *H2*. Store facility ($41=-0.12$; $p>0.05$, one tailed); quality (effectiveness) ($\gamma_{31}=0.02$; $p>0.05$, one tailed); promotion ($\gamma_{61}=0.06$; $p>0.05$, one tailed); and references ($\gamma_{71}=-0.01$; $p>0.05$, one tailed) did not have significant effect upon

Table 2. Demographic characteristics

Demographic Characteristics of Samples			
Demographic Characteristics	Illness Purpose (Percent)	Health Purpose (Percent)	Significance (p-Value)
Gender			
Female	86.90	85.90	1.00
Male	13.10	14.10	1.00
Type of store			
DS near home	70.70	53.00	0.00
DS near office	17.50	17.10	0.91
DS in plaza	19.30	36.00	0.00
DS on the way	19.20	17.70	0.66
Other DS	5.90	14.60	0.00
Time of visit			
5-8	2.30	1.20	0.40
8-11	10.60	8.50	0.43
11-14	15.70	20.70	0.12
14-17	17.80	23.80	0.08
17-20	63.40	54.30	0.03
20-23	8.40	7.90	0.85
23-26	0.30	1.80	0.04
Education			
Primary school education	1.60	1.20	0.74
Secondary school education	5.40	7.30	0.35
College education	9.20	11.60	0.31
Bachelor degree	68.80	64.60	0.81
Master degree	12.90	12.20	0.05
Above master degree	0.70	2.40	0.23
Others	0.90		
Profession			
Student	20.60	22.00	0.69
Housewife	5.90	6.10	0.93
Retiree	0.30	0.60	0.64
Employee	49.50	50.00	0.90
Business owner	9.40	9.10	0.91
Civil servant	5.90	6.70	0.71
Professional	7.00	5.50	0.50
Income / month			
Income less than 5,000	11.20	10.50	0.79
Income 5,001-10,000	18.90	16.70	0.51
Income 10,001-15,000	21.40	19.80	0.65
Income 15,001-20,000	11.40	8.60	0.32
Income 20,001-40,000	22.60	21.00	0.66
Income 40,001-60,000	5.80	9.30	0.11
Income 60,001-80,000	1.10	4.90	0.00
Income >80,000	3.00	4.90	0.22

Note: DS = Drugstore

Table 3. Behavioral characteristics

Behavioral Characteristics	Statistical Value	Illness Purpose	Health Purpose	Significance *(p-Value)*
Number of drugstores visited in 12 months	Mean	2.95	3.26	0.28
	SD	2.74	3.98	
	Minimum	1	1	
	Maximum	20	25	
Share of the store regularly buy from	Mean	50.49	51.49	0.73
	SD	31.35	32.45	
	Minimum	1	1	
	Maximum	100	100	
Frequency of visit per year	Mean	14.08	16.32	0.05
	SD	12.60	14.00	
	Minimum	1	1	
	Maximum	96	72	
Time spent per visit	Mean	11.6	17.89	0.00
	SD	8.05	12.13	
	Minimum	1	2	
	Maximum	60	90	
Money (baht) spent per visit	Mean	259.22	662.10	0.00
	SD	420.52	621.14	
	Minimum	1	1	
	Maximum	5,000	3,500	
Age	Mean	30.33	30.78	0.60
	SD	9.50	10.14	
	Minimum	12	15	
	Maximum	74	80	
Numberof family members	Mean	4.56	4.4	0.34
	SD	1.94	1.86	
	Minimum	0	1	
	Maximum	17	12	
Number of family members buy for	Mean	3.35	3.33	0.91
	SD	1.82	1.68	
	Minimum	1	1	
	Maximum	13	10	

Note: SD = Standard deviation

the response for store selection causing the *H3, H4, H6, and H7* to be rejected ($p<0.05$, one tailed). The proportion of variance explained, or R^2 of the equation is 0.19.

Multiple group analysis demonstrated that the structural model of the two buying purpose groups were not significantly difference. The significant variables affecting consumers' responses on the use of drugstore, illustrated in the model shown in Figure 2, were service ($\gamma_{51}=0.28$; $p<0.01$, one tailed); product assortment ($\gamma_{11}=0.18$; $p<0.01$, one tailed); and reasonable price ($\gamma_{21}=0.11$; $p<0.05$, one tailed); respectively.

From the results, *H8* and *H9* were rejected ($p<0.05$, one tailed). Illness purpose did not cause quality, service, and references to positively affects consumer's response toward

Table 4. Measurement model results

Constructs and Indicators	Completely Standardized Factor Loadings	Reliability	Proportion of Variance Extracted
Product assortment		**0.88**	**0.62**
Availability	0.82	0.67	
Full range	0.89	0.79	
Brand variety	0.63	0.40	
Quality (Effectiveness)		**0.92**	**0.81**
Good, efficacious drug	0.80	0.64	
Effective products		0.99	0.98
Reasonable price		**0.82**	**0.55**
Appropriate price		0.87	0.76
Low price	0.59	0.35	
Store facility		**0.89**	**0.51**
Used to the layout		0.70	0.49
Clean & organized	0.70	0.49	
Easy buying layout	0.74	0.55	
Service		**0.92**	**0.63**
Staff service attention	0.69	0.48	
Staff listening with empathy	0.91	0.83	
Staff gives clear explanation	0.95	0.90	
Knowledgeable staff	0.64	0.41	
Reliable staff		0.73	0.53
Promotion		**0.87**	**0.62**
Demo sample & trial	0.79	0.62	
Frequent customer privilege	0.81	0.66	
Enjoyable shopping here	0.79	0.62	
Frequent promotion	0.76	0.58	

Table 5. Structural model results

Independent Constructs	Response on Store Choice	*t-Score*	Fit Statistics		
Service	0.28	*3.91*[a]	Chi-square	=	1359.11
Product assortment	0.18	*3.25*[a]	Degrce of Freedom	=	349
Reasonable price	0.11	*1.77*[b]	Probability	:	*p=0.0*
Promotion	0.06	*1.16*	GFI[c]	=	0.89
Quality	0.02	0.84	NFI[d]	=	0.95
References	-0.01	*-0.30*	CFI[e]	=	0.97
Store facility	-0.12	*-1.47*	IFI[f]	=	0.97
Proportion of variance explained	0.19				

[a]Significance p <0.01, [b]Significance p<0.05, [c]Joreskog and Sorbom's (1989) *"GFI= goodness of fit index"*, [d]Bentler and Nonett's (1980) *"NFI = normed fit index"*, [e]Bentlers (1990) *"CFI = comparative fit index"*, [f]Bollen's(1989) *"IFI = incremental fit index"*

Structural Model from Multiple Group Analysis

Restricted structural model, free measurement model estimation:best fit from the analysis

Response =	0.18Product*	+	0.11Price*	+	0.02Quality	-	0.12Store
	(0.05)		(0.06)		(0.03)		(0.08)
	3.36		1.77		0.84		-1.47
	+ 0.28Service*	+	0.06Promote	-	0.01Refer	Eror var =0.92, R^2 =0.19	
	(0.07)		(0.05)		(0.05)	(0.071)	
	4.00		1.16		-0.30	12.83	

** Denotes significant attributes*

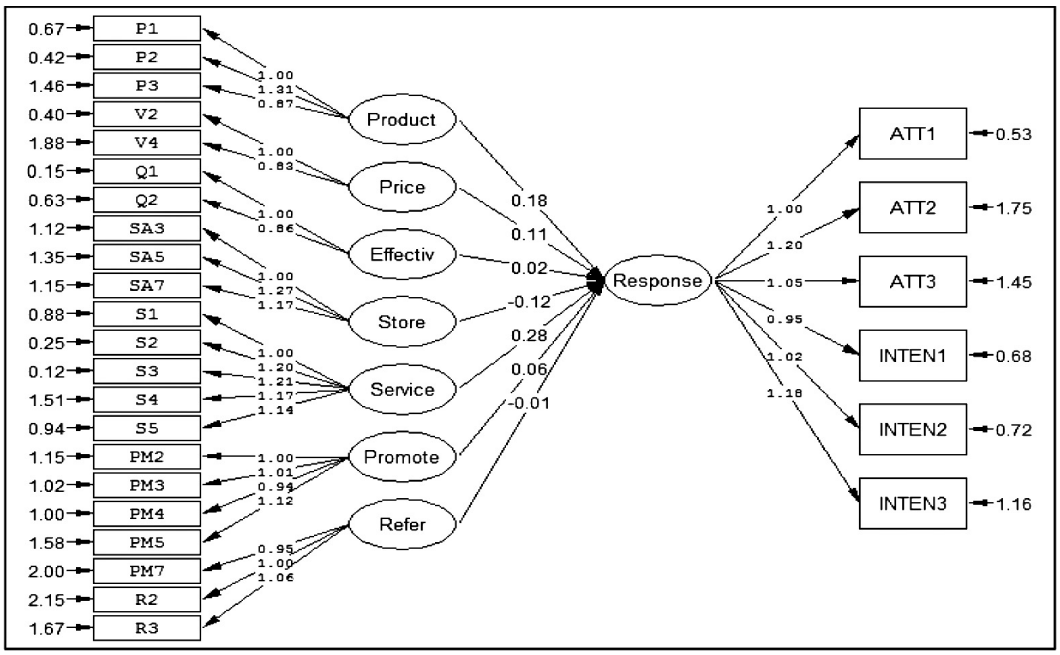

Figure 2. Structual model: restricted structural model, free measurement model estimation

the use of drugstore more than health purpose. And health purpose did not cause product assortment, reasonable price perception, store facility, and promotion to affect consumer's response toward the use of drugstore more than illness purpose. It could be stated from this result that the two models of different buying purposes: illness purpose and health purpose, were not different. The proportion of variance explained, or R_2 of the equation is 0.19. The low proportion of variance extracted could be explained by the nature of drugs being necessary product, and the visit to a drugstore being unavoidably forced action, by the need to cure, rather than self-initiated action, causing the proportion of variance extracted to be relatively low.

Discussion and Conclusion

The findings of this study call for attention on careful application of general retail concept to drugstore management. For general retailer, attributes affecting store patronage could be derived from concept of retail mix, being product assortment, physical

facility, price, service, promotion, organization. For drugstore, although certain levels of correlation between each single attribute and response toward drugstore were observed, not all of them significantly influenced the response toward drugstore when they were altogether in an aggregated manner. Some of the basic attributes in retail mix such as promotion, physical facility did not show significant effect as they do in other general retail stores.

Service, product assortment, and reasonable price attributes were found to be the three most significant attributes affecting responses toward drugstore. The findings support recent study on the prediction of retail patronage which also indicated these three attributes being the first three important determinants of store choice.[35]

As the measurements of service from the study were staff attentiveness, communication skill, reliability, and knowledge; drugstore managers should pay high attention to develop staff's competency, skill, and image that help to increase consumer's perception of the store's good service through these competencies. The process starts from recruitment, by putting up appropriate job specification that clearly indicates the act-of-good-service, and position qualification, to formal training. Drugstore managers should provide proper training with clear sets of standard operation procedures for all in-store interactive sales and service situation. However, the most important matter is the forming of the right attitude, attitude of caring for service, among the staff. Heavy practice and on-the-job monitoring, are important actions to ensure desired performance on site. Managers should also be trained to observe, coach, and supervise. Regular evaluation and feed back on staff's sales/service performance can be another tool to keep the quality up. Advanced technology, such as the use of closed circuit television (CCTV), sound recording system, or personal digital assistant (PDA) with product information, can be applied for service monitoring and performance improvement. Signage and decorating graphic in the store indicating store's dedication to good and caring service can be of value to the store atmosphere and consumer's perception of store's commitment to good service.

Product variety, full range of products, availability of products needed, brand variety, and product quality are the significant determinants of response toward drugstore. Drugstore managers should do regular research to identify the range of need of store's target customers, in order to always have those products customer wanted. Consideration to carry full range of drugs and health related products can be of value. New products, new innovation, and new product knowledge add value to the store's attractiveness.

Proper categorization of merchandises and the display of brands can help to create the consumers' perceptions of store's good variety of products and keep them coming back. A well designed website, with adequate information on the products in the drugstore

can generate consumers' confidences on store's product assortments and availability.

Price is always the issue of buying and selling. Since price is a relative feature, attempt should be made to create the perception of low price at reasonable level measured against consumers' expectations. Keeping price in the competitive level is necessary to consumers' responses and repatronages. Pricing strategies aiming to create the low price value should be wisely used. Strategies like everyday low price (EDLP) can be employed for the general products of daily need, such as drugs for general use or drugs for chronic illness. At the same time, the high price low price (Hi-Lo) cycle strategy is used to create more excitement for the more impulse buying group of products, like health promoting products. No matter which strategies are executed, clear communication e.g. the use of signage, greetings, and pamphlets should accompany the pricing strategies in order to create higher impact on the perception of reasonable to good price in the customers' minds. Store brands or house brand products is another mean to create reasonable price perception by positioning the price of store brands one level below to the market leaders' prices. Customer loyalty program such as frequent buyers privilege, score collection, discount card, seasonal coupon, and event specials can help to further push on consumers' perceptions of reasonable price. The proper display of low price specials will help to create the perception of store's low price positioning. And the practice of showing full price tag side by side to the lower actual selling price on the package is another way to convey the feeling of getting better deal, leading to the perception of reasonable price.

The study reviewed that the effectiveness of use was related to the perception of quality of the store, but not the individual products. When a product that is recommended by the drugstore shows effectiveness, the credit also belongs to the drugstore, not just the product. Such effect confirms the importance of service as mentioned above. Store sales staff should always try to provide recommendation on products with good knowledge whenever possible, in order to increase consumers' recognitions of being advised by the store. For drugs, the main action is to get the right drug for the right illness and to provide right advice for proper expectation of the treatment. For non-curative products, such as health promoting products, the key strategy is to build confidence in the products, which can be achieved by citing references, such as source of origin, testimonials, and proven effectiveness of use. Another important action is the proper use of language that the consumer can easily accept and understand. Follow up call to check on the condition after use is another action that builds the sense of effectiveness, as well as the sense of caring from the drugstore.

Since the results showed no moderating effect from buying purposes, the positioning of a drugstore can be placed to serve either single purpose or both, while the store attributes to

be provided were not different. Result also showed that having pharmacist on duty did not significantly draw customer to the drugstore, but rather be the basic expectation that pharmacist should be on duty by default, acting as a hygiene factor rather than significant motivating determinant of response toward drugstore.

In addition to the above mentioned store attributes, another important aspect is communication. Formatted message reinforcing the store dedication to the significant attributes, such as care for service, product assortment, and reasonable price can be added to all dialogues and in-store medias, in order to repetitively remind customers of store's offering, to help convert new customers to be regular customers, as well as to maintain loyalty customers.

Recommendations

This study was limited to consumers in Bangkok, which is a model of big city or metropolis. Results were exploratory and should be used with care when applying to geographic location of different environment. The samples obtained through data collection were people with relative concern on health, from non-service location. It would be interesting to see the result from actual customers coming out of a drugstore or from the different actual trade area with different demographic profile of customers, as well as to further explore the moderating effect by testing in experimental situation.

References

1. Kumar P, Kalwani MU, Dada M. The impact of waiting time guarantees on customers' waiting experiences. Marketing Sci 1997; 16(4):295-314.
2. Levy M, Weitz BA. Retailing Management. 5th ed. New York: McGrawHill, 2004: 117-33.
3. Mitchell VW. Re-conceptualizing consumer store image processing using perceived risk. J Bus Res 1999; 54: 167-72.
4. Popkowski Leszczyc PTL, Sinha A, Timmermans H. Consumer store choice dynamics: an analysis of the competitive market structure for grocery stores. J Retail 2000; 76(3): 323-45
5. Davidson WR, Sweeney DJ, Ronald WS. Retailing Management. New York: John Wiley & Sons,1988: 46-157
6. Powpaka S. Consumer's brand choice of pharmaceutical products during economic depression: an empirical investigation. J Pharm Mark Manage 2001; 14(1): 27-61.
7. Verhallen TMM, Nooij GJ. Retail attribute sensitivity and shopping patronage. J Econ Psy 1982; 2: 39-55.
8. Ailawadi KL, Keller KL. Understanding retail branding: conceptual insights and research priorities. J Retail 2004; 80: 331-42.
9. Schiffman L, Dash J, Dillon W. The contribution of store image characteristics to store type choice. J Retail 1977; 53(2): 3-14, 46.
10. Doyle P, Fenwick I. How store image affects shopping habits in grocery chains. J Retail 1975; 50(4): 39-52.
11. Arnold SJ, Oum TH, Tigert JD. Determinant attributes in retail patronage: seasonal, temporal, regional and, international comparisons. J Mark Res 1983; 21: 149-57.
12. Hortman SM, Allaway AW, Mason JB, et al. Multi-segment analysis of supermarket patronage. J Bus Res 1990; 21: 209-23.
13. Martineau P. The personality of the retail store. Harv Bus Rev 1958; 36:47-56.
14. Jacoby J, Mazursky D. How Consumers View

New Stores and Merchandise. Lexington, MA: DC Heath and Company, 1985: 155-9.

15. The Ratiopharm. CFP Report on Pharmacy Services: Consumers' Perception of Pharmacy. 2004, Canada: Ratiopharm Inc, 2004.
16. Betancourt RR, Gautschi D. Two essential characteristics of retail markets and their economic consequences. J Econ Behav Org 1993; 21(3): 277 94.
17. Solgaard SH, Hansen T. A hierarchical Bayes Model of choice between supermarket formats. J Retail and Cons Serv 2003; 10: 169-80.
18. Oppewal H, Koelemeijer K. More choice is better: effects of assortment size and composition on assortment evaluation. Inter J Res Mark 2005; 22: 45-60.
19. Broniarczyk SM, Hoyer WD, McAlister L. Consumers' perceptions of the assortment offered in a grocery category: the impact of item reduction. J Mark Res 1998; 35: 166-76.
20. Popkowski Leszczyc PTL, Timmermans H. Experimental choice analysis of shopping strategies. J Retail 2001; 77: 493-509.
21. Grewal D, Monroe KB, Krishnan R. The effect of price comparison advertising on buyers' perceptions of acquisition value and transaction value. J Mark 1998; 62: 46-59.
22. Baker J, Parasuraman A, Grewal D, et al. The influence of multiple store environment cues on perceived merchandise value and patronage intentions. J Mark 2002; 66(2): 120-42.
23. Darden WR, JoAnn S. How Consumers View New Stores and Merchandise. Lexington, MA: DC Heath and Company, 1985: 161- 72.
24. Darley WK, Jeen-Su L. Store-choice behavior for pre-owned merchandise. J Bus Res 1993; 27: 17-31.
25. Brady MK, Cronin JJ, Brand RR. Performance-only measurement of service quality: a replication and extension. J Bus Res 2002; 55: 17-31.
26. Fullerton G, Taylor S. Mediating, interactive and non-linear effects in service quality and satisfaction with services research. Can J Admin Sci 2002; 19(2): 124- 6.
27. Parasuraman A, Zeithaml VA, Berry LL. SER VQUAL: a multiple-item scale for measuring consumer perceptions of service quality. J Retail 1988; 64(1): 12-40.
28. Marshall D. Appropriate meal occasions: understanding conventions and exploring situational influences on food choice. Inter Rev Retail 1993; 261-301.
29. Simonson I, Tversky A. Choice in context: tradeoff contrast and extremeness aversion. J Mark Res 1992; 29: 281-95.
30. Kenhove PV, Wulf K, Waterschoot WV. The impact of task definition on store-attribute saliences and store choice. J Retail 1999; 75: 125-37.
31. Hair JF, jr, Anderson RE, Taham RL, et al. Multivariate Data Analysis, 5th ed. New Jersey: Prentice Hall, 1998: 141-213, 387-436.
32. Joreskog KG, Soroborn D. PRELIS: A Program for Multivariate Data Screening and Data Sum marization. 2nded. Chicago: Scientific Software Inc, 1993.
33. Joreskog KG, Soroborn D. LISREL8: Structural Equation Modeling with the SIMPLIS Command Language. Chicago: Scientific Software Inc, 1993.
34. Nunnally JC. Psychometric Theory. 2nded. New York: McGraw-Hill, 1978.
35. Pan Y, Zinkhan GM. Determinants of retail patronage: a meta-analytical perspective. J Retail 2006; 82(3): 229-43.