THE IMPACT OF PERCEIVED SERVICE QUALITY, CUSTOMER PERCEPTION AND PRICE STRATEGY ON PHARMACY CUSTOMER DEVOTION

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Abstract: The purpose of the study is to observe the factors which best enhance the customer devotion and loyalty. The impact of perceived service quality of pharmacy structure, medication price strategies and perception about pharmacists on customer devotion with the mediating role of pharmacy engagement has been studied in the following research. Random sampling technique was used to gather the required data. Data was analyzed through confirmatory factor analysis (CFA) by using PLS software. Additionally, structure equation modeling technique (SEM) was used to test the hypotheses. The results of the study revealed that there is a positive correlation between perceived service quality of pharmacy structure, pharmacy customer devotion perception and pharmacy engagement. Moreover, pharmacy engagement also strengthens the linkage of pharmacy customer devotion. Meanwhile, pharmacy engagement also mediates the relationship between perceived service quality of pharmacy structure, customer perception about pharmacist and pharmacy customer devotion.

Introduction

From the days of yore and in the current era, pharmacy business has been of utmost importance. Likewise in Thailand, the country focused in this study, has this business of value worth more than USD 570 million as per the stats of 2015 having over 15,000 drugstores (Sommanustweechai et al., 2018). Moreover, the growth rate is also noticeable with 15-20% growth-rate per annum. This burgeoning scope and profitability has given rise to very rigorous competition which have a strong impact on the pharmacy business in Thailand (Chan and Ching, 2005). Other impacts, according to this study, include: commodity type drug stores operations, pricing strategies and to some extent, service quality perception. However, as new drug stores are making entrance in the market and introducing new chains competition has been on fire which is ultimately closing many firms and drug stores.

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Another factor responsible for this factor is the commencement of Association of Southeast Asian Nations (ASEAN) – an economic cooperation in Asian region – have had a noticeable impact on Thailand's pharmacy business and hence, on consumer behavior (Te et al., 2018).

Although, customer engagement and customer devotion have been studied in a number of past researches owing to the importance of keeping the customers engaged with the business (So et al., 2016; Vivek et al., 2012). However, only a few papers could be found which deal with the impact of these variables on the pharmacy business in Thailand including the impact of medication price strategy, customer perceived service quality of pharmacy structure and pharmacist on customer engagement and customer devotion. For example, in case of pharmacists the paper written by Castaldo et al. (2016), shows that the trust which is built by customers have a great impact on satisfaction, devotion and loyalty in community pharmacies. Antunes et al. (2015), have studied an additional factor that communication and social skills of pharmacists also have an effect on customer devotion to the community pharmacies.

− To analyze the impact of perceived service quality of pharmacy structure on pharmacy customer devotion
− To study the impact of customer perception about pharmacist on pharmacy customer devotion
− To analyze the impact of medication price strategy on pharmacy customer devotion
− To analyze the impact of perceived service quality of pharmacy structure on Pharmacy engagement
− To study the impact of customer perception about pharmacist on their engagement in pharmacy
− To analyze the impact of medication price strategy on pharmacy engagement
− To determine the mediating effect of pharmacy engagement perceived service quality of pharmacy structure, customer perception about pharmacist and medication price strategy on customer devotion in pharmacy.

Literature Review

Pharmacy structure in Thailand is composed of two chunks which are private enterprises and Government enterprises. The Former consists of: local companies which produce generic drugs and distribute mostly within the country and meet the demand of the community pharmacy. Almost 75% of the industry consists of such local companies which include: Biolab, Siam Pharmaceutical, Thai Meiji, Greater Pharma etc. Multinational companies the products of which are mostly imported and original. They operate in Thailand through acquiring a license. Another method they seek is to open an independent new company having its own sales and marketing department. In Thailand a few renowned multinational firms include: Pfizer, Novartis, Sanofi and Merck. On the other hand, Government enterprises include: Defense Pharmaceutical Factory (DPF) which is an operational factory

completely controlled by defense industry and energy center, Office of The Permanent Secretary for Defense and Ministry of Defense and Government Pharmaceutical Organization (GPO), a government enterprise, which falls under the authority of Ministry of Public Health (MPH). Hospitals come under the Ministry of Health which is producing generic drugs with their own premises.

The tasks performed by Defense Pharmaceutical Factory (DPF) include the manufacturing of the pharmaceutical products which are then supplied mostly to the military and government agencies. Should the need arise DPF purchases the products as well. Another important function performed by DPF is to analyze such products as per the set standards. On the other hand Government Pharmaceutical Organization (GPO) continuously does the part of research and development for new medical / pharmaceutical products to meet the needs of public in Thailand (Saramunee et al., 2011).

According to Pereboom (2001), pharmacists are the professionals who practice in pharmacy, the field of health sciences which deals with safe, effective and efficient use of medication. They are also known by the name of chemists and druggists. The area of knowledge which pharmacists deal with includes: actions of drugs, their uses, therapeutic roles, drug interaction, parameter monitoring, side effects etc. The job of a pharmacist is to convey and interpret this specialized knowledge to the patients, physicians and health care providers. The most common post title given to them is community pharmacist also named as retail pharmacist or first-line pharmacist. Their responsibility is to inculcate the knowledge of medication – usage and precautions – to the concerned persons (Lebovitz and Eddington, 2019).

Bharadwaja et al. (2018), suggested that not only the customers but importers are also concerned about the product / service quality. However, in a past few decades, the concept of quality has greatly dipped from the manufacturing sector to the service sector and hence has been given a great deal of importance in strategy formation. Moreover, in the race of being the most efficient many firms have been striving for the betterment of service quality to attain comparative advantage in the market (Ngansathil, 2001). According to Parasuraman et al. (1985), service quality is defined as, "*the contact between a customer and the service provider particularly focused on meeting the needs of the customer*". In another study, service quality has been defined as, the assumption made by the service provider about the perception of the consumer and ultimately the success or failure of actually meeting those expectation (Zeithaml et al., 1990).

According to Miller and Johnson-Laird (1976), perception can be defined as the process of choosing, sorting and interpreting the sensations which have been gathered by sensory organs. The scientific study of perception hence deals with what we make of these raw sensations and how human mind gives meaning to it and ultimately takes decisions. Each individual has the capacity to interpret this knowledge or sensation according to his/her distinct needs and past experiences (Regan, 2000). The basic process of perception can be shown in the following figure.
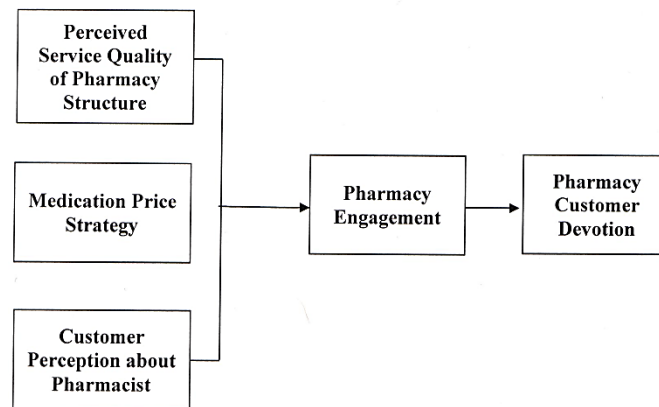
As stated by Sharma et al. (2011), customers set an expectation from the organization and its services and then according to those views they perceive about that organization's performance. Likewise, in case of pharmacy community, customer perception has been explained when customers feels engaged with specific pharmacies they will surely give positive feedback, try to come again to that pharmacy and encourage people for purchasing medicines from that pharmacy (Nitadpakorn et al., 2017). Briefly, perceptions and expectations can be described as desires or wants of a customer. In the end, from the lens of a customer's perception, it is more about what 'should be' instead of what 'would be'. As a result, with each day passing, it is becoming necessary for the organizations to measure and analyze customer's perceptions and their desires (Miranda et al., 2018) and ultimately mitigate the gap between this perception and what they have to offer.

However, business owners have an axiom that getting a customer in pharmacy is rather easy than keeping the existing customer. This saying interprets the dynamic environment which is also the case of community pharmacy in Thailand as discussed before. To ensure customers' devotion, many tactics have been employed by the business owners. Yang et al. (2018), have found that more than 90% businesses have set their first priority to give the best customer experience. Carranza et al. (2018), has given a few reasons why customer devotion is so important. Firstly, there is word of mouth. Marketing done through word of mouth is authentic and all the more viable in this era. Human psychology is to trust the words of the person he/she trusts personally. Hence, when the customers are devoted they spread positive word of mouth which in the long run generate more customers. Secondly, loyal customers stick with you through thick and thin and are devoted and loyal. When the times are hard for the firm they stay and even when mistakes are made such folks gives you the benefit doubt and stay loyal to the business. Thirdly, frequent purchases ensue and a higher form of devotion is established as customer buys the product just to support the company rather than fulfilling his/ her needs. Lastly, the feedback of devoted customers act as

company's focus group and gives constructive feedback about the new and existing products (Budianto, 2019).

Theoretical Framework

Keeping in mind the above literature following hypotheses have been deduced for this current study,

H1: Perceived service quality of pharmacy structure has significant positive effect on pharmacy customer devotion
H2: Medication price strategy has significant positive effect on pharmacy customer devotion
H3: Customer perception about pharmacist has significant positive impact on pharmacy customer devotion
H4: Perceived service quality of pharmacy structure has significant positive effect on pharmacy engagement
H5: Medication price strategy has significant positive effect on pharmacy engagement
H6: Customer perception about pharmacist has significant positive impact on pharmacy engagement
H7: Pharmacy engagement has significant positive effect on pharmacy customer devotion
H8: Pharmacy engagement mediates the relationship between perceived service quality of pharmacy structure and pharmacy customer devotion
H9: Pharmacy engagement mediates the relationship between medication price strategy and pharmacy customer devotion
H10: Pharmacy engagement mediates the relationship between customer perception about pharmacist and pharmacy customer devotion

Methodology

The results were gathered from community pharmacy customers. Out of total 300 questionnaires 265 were returned back and 11 out of these were excluded due to missing and vague values and markings. Demographic profile demonstrated that the male percentage of respondents was 55.2 while the remaining were female i.e. .44.8. Regarding the age group, 49 percent of the respondents were of the age group of 25-45 while others were above 45 including a few senior citizens (15%). Moreover, 90% of the respondents were literate. All the items under this study were taken from the previous research of Nitadpakorn et al. (2017). Five-point Likert scales were chosen to measure the items present in the questionnaire ranking from strongly disagree to strongly agree (1 to 5). Firstly, to measure 'Perceived Quality of Pharmacy Structure' (PQPS), scale of three items was used. A sample item is: *'Perceived quality pharmacy structure look clean, has enough light and look professional'*. Moreover, in order to measure 'Medication price strategy' (Price) three items were utilized. Sample item is: *'Pharmacy has comparatively lower prices of medicines as compared to others'*. Thirdly, to measure Customer's

'Perception about Pharmacist' (PAP) a scale with five items was used. One sample of those items included: '*The pharmacist at the pharmacy provide the customer with acute knowledge and dependable service*'. Pharmacy Engagement (PE) was measured by choosing a scale comprising of total nice items. Sample item articulate as: '*I don't want to visit other pharmacies when I'm receiving the services at the pharmacy I regularly visits*'. Lastly, to measure 'Pharmacy Customer Devotion' (PCD), five items were used including: '*I encourage friends and relatives to engage with the pharmacy I regularly visits.*'

Results

As the items loading high (> 0.50) on their variables the validity of the 'measurement scale' will be considered as "convergent". Moreover, the items in table 1 can be observed to have the value between 0.590 to 0.852 and AVE value for all variables is more than 0.50 with CR value exceeding the figure of 0.8, it can be deducted that 'convergent validity' of all the variables has been established. The convergent validity is highlighted in Table 1 given below.

Table 1: Convergent Validity

Constructs	Items	Loadings	CR	AVE
Perceived Service Quality of Pharmacy Structure	PQPS1	0.861	0.899	0.749
	PQPS2	0.873		
	PQPS3	0.861		
Medication Price Strategy	PR1	0.896	0.943	0.847
	PR2	0.939		
	PR3	0.925		
Customer Perception about Pharmacist	PAP1	0.865	0.913	0.678
	PAP2	0.869		
	PAP3	0.794		
	PAP4	0.717		
	PAP5	0.862		
Pharmacy Engagement	PE1	0.820	0.933	0.640
	PE2	0.762		
	PE3	0.893		
	PE4	0.732		
	PE5	0.644		
	PE6	0.710		
	PE7	0.873		
	PE8	0.921		
Pharmacy Customer Devotion	PCD1	0.784	0.864	0.560
	PCD2	0.792		
	PCD3	0.800		
	PCD4	0.668		
	PCD5	0.686		

Table 2 delineates the HTMT-Ratio with which we assess the 'discriminant validity'. When the value of "Heterotrait-Monotrait ratio" is less than 0.90 it can be

said that discriminant validity has been established and as per the reading of our study all values are less than 0.90.

Table 2: HTMT ratio

	PAP	PCD	PE	PQPS	PR
PAP					
PCD	0.387				
PE	0.277	0.619			
PQPS	0.360	0.639	0.454		
PR	0.200	0.430	0.267	0.711	

Findings showed that Perceived Quality of Pharmacy Structure (PQPS) has positive impact on Pharmacy Customer Devotion (PCD) which supported the H1 hypothesis (β = 0.298, t = 4.203). Conversely, hypothesis 2 wasn't supported by the results (β = 0.073, t = 1.318). This shows that there is no significant relation between medication pricing strategy (PR) and Pharmacy Customer Devotion (PCD). Similarly, H3 is also not supported which reveals that significant negative relationship exists among perception about pharmacist and pharmacy customer devotion (β = -0.128, t = 2.105). Moreover, H4 anticipated the significant effect of Perceived Quality of Pharmacy Structure (PQPS) on Pharmacy Engagement and the result expressed the positive relation of PQPS on PE (β = 0.358, t = 6.026). Hence, fourth hypothesis was supported by the findings. However, H5 i.e. relationship between pricing (PR) and Pharmacy Engagement (PE) wasn't supported as the findings depicted insignificant association among them (β = 0.002, t = 0.029). Likewise, Hypothesis 6 results articulated that Perception about pharmacist (PAP) has negative effect on Pharmacy Engagement (PE). β = -0.145, t = 2.328 and so results does not supported the hypothesis. Furthermore, H7 reveals that Pharmacy Engagement (PE) significantly and positively influence Pharmacy Customer Devotion (PCD), that supported the results (β = 0.377, t = 7.324).

Table 3: Path Analysis

	Main Effects	Std. Beta	Std. Error	T Value	P Values	L.L	U.L
H1	PQPS -> PCD	0.298	0.071	4.203	0.000	0.172	0.407
H2	PR -> PCD	0.073	0.055	1.318	0.094	-0.020	0.163
H3	PAP -> PCD	-0.128	0.061	2.105	0.018	-0.237	-0.036
H4	PQPS -> PE	0.358	0.059	6.026	0.000	0.262	0.456
H5	PR -> PE	0.002	0.061	0.029	0.488	-0.100	0.103
H6	PAP -> PE	-0.145	0.062	2.328	0.010	-0.251	-0.042
H7	PE -> PCD	0.377	0.051	7.324	0.000	0.297	0.465

Table 4 delineates the mediating role of Pharmacy Engagement (PE). The "bootstrapping analysis" illustrated in this table shows that H8 and H10 were significant with t-value of 4.817, 2.006 and P values of 0.000, 0.022 respectively. In addition, the third mediating effect H9 wasn't supported with t-value of 0.028

and P value of 0.489. The indirect effect employing '0' between lower limit (L.L) and upper limit (U.L) is considered to be not supported.

Table 4: Indirect Effect

	Indirect Effects	Std. Beta	Std. Error	T Value	P Values	L.L	U.L
H8	PQPS->PE->PCD	0.135	0.028	4.817	0.000	0.094	0.185
H9	PR -> PE -> PCD	0.001	0.023	0.028	0.489	-0.039	0.038
H10	PAP-> PE -> PCD	-0.055	0.027	2.006	0.022	-0.104	-0.014

Discussion

The findings of the study show that pharmacy customer devotion (PCD) is increased by the perceived service quality of pharmacy structure (PQPS) while vice versa in case of perception about pharmacist (PAP). The results enlightened us that when a customer has a better PQPS which is being provided in the pharmacy structure of Thailand he/she becomes more devoted and loyal. Furthermore, the study of mediating role of Pharmacy Engagement (PE) showed that PE strengthens this relation and customer becomes more devoted and is more likely to stay loyal with the company. Secondly, the relation between medication price strategies (PR) was studied and the results showed no noticeable link between the two neither pharmacy customer devotion had any impact nor the pharmacy engagement in this linkage. Finally, the findings elucidated that customers' perception about the pharmacist does not plays role in pharmacy customer devotion. But the linkage was found to be fortified by the mediating effect of pharmacy engagement. The community pharmacy in Thailand should more focus on engaging the customers with the business by giving better service quality in current pharmacy structure and hire, employ or train better pharmacists to keep the customers from finding substitutes. There are various limitations in the study.

Conclusion

Firstly, the study was conducted in Thailand. It can be expanded geographically. Secondly, the sample size could be increased to get more accurate results. Thirdly, only pharma industry was brought under study. Other industries involving retail could be studied and the impact of customer perception about the service quality or product quality can be studied. Correspondingly, the mediating effect of pharmacy engagement was studied in further studies any different mediator could be selected like governmental policies or political environment of the country.

This study suggested to the policymakers that they should prepare the policies about the pharmacy customer devotions that are necessary for the financial performance of the company. This study has few limitations that may be the directions for upcoming researchers. The current study take only three factors that affect the pharmacy customer devotions and ignore other factors and upcoming studies may add these factors in their studies. In addition, this study use only one mediator and other studies may use more factors as mediator.

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WPŁYW POSTRZEGANEJ JAKOŚCI USŁUG, PERCEPCJI KLIENTA I STRATEGII CENOWEJ NA PRZYWIĄZANIR KLIENTA DO APTEKI

Streszczenie: Artykuł przedstawia jest obserwacja czynników, które najlepiej zwiększają oddanie i lojalność klientów. Wpływ postrzeganej jakości usług struktury apteki, strategii cen leków i postrzegania farmaceutów na oddanie klientów z mediacyjną rolą zaangażowania apteki został zbadany w następujących badaniach. Do zebrania wymaganych danych zastosowano technikę losowego próbkowania. Dane analizowano za pomocą potwierdzającej analizy czynnikowej (CFA) przy użyciu oprogramowania PLS. Dodatkowo do przetestowania hipotez zastosowano technikę modelowania równań struktur (SEM). Wyniki badania wykazały, że istnieje pozytywna korelacja między postrzeganą jakością usług struktury apteki, postrzeganiem oddania przez klientów apteki a zaangażowaniem apteki. Co więcej, zaangażowanie w aptekę wzmacnia również powiązanie z przywiązaniem klientów aptek. Tymczasem zaangażowanie apteki pośredniczy również w związku między postrzeganą jakością usług apteki, a zaangażowaniem farmaceuty.

Słowa kluczowe: zaangażowanie w aptekę, postrzegana jakość usług, postrzeganie klienta, strategia cenowa z przywiazaniem do apteki

感知的服务质量，客户的感知和价格策略对制药客户忠诚度的影响

摘要：研究的目的是观察最能增强客户忠诚度和忠诚度的因素。在以下研究中，研究了感知到的药房结构的服务质量，药品价格策略以及对药剂师的认知对客户忠诚度的影响，以及药房参与的中介作用。使用随机抽样技术收集所需数据。使用PLS软件通过验证性因子分析（CFA）分析数据。另外，使用结构方程建模技术（SEM）来检验假设。研究结果表明，药房结构的感知服务质量，药房客户忠诚度感知与药房参与度之间存在正相关关系。此外，药房合作也加强了药房客户忠诚度的联系。同时，药房参与还调解了药房结构感知服务质量，顾客对药剂师的认知与药房顾客忠诚之间的关系。

关键字：药房业务，感知服务质量，客户感知，药房客户忠诚度的价格策略