Research article

Relationships of Servicescape and Service Quality with Customer Loyalty in Good Pharmacy Practice Accredited Independent Pharmacies

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Abstract

Objective: To investigate the relationship of servicescape and service quality with customer loyalty in Good Pharmacy Practice (GPP) accredited independent pharmacies. **Methods:** This research was an analytical cross-sectional survey. The respondents consisted of customers who were age over 18 years old and visited or purchased products from 8 selected GPP accredited independent pharmacies in Bangkok metropolis between February and July 2021. The subjects completed self-administered questionnaires after receiving service. The questionnaires assessed the opinions toward servicescape and service quality of GPP accredited pharmacies and opinions on three customer loyalty behaviors including word of mouth (WOM), purchase intention (PI) and price sensitivity (PS). **Results:** 384 pharmacy customers responded to the questionnaires. 91.14 % of respondents were repeat customers. The customers rated their experiences at pharmacies in term of servicescape and the service quality at 4.23±0.52 and 4.34±0.54 out of five, respectively. Overall servicescape and service quality significantly correlated to all domains of customer loyalty i.e., WOM, PI and PS (P < 0.05). Overall servicescape had a weak but significantly positive correlation to WOM (r = 0.33) and PI (r = 0.26) while it showed a weaker correlation to PS (r = 0.10). Additionally, service quality moderately correlated to both WOM (r = 0.53) and PI (r = 0.47) while it revealed a weaker association with PS (r = 0.31). **Conclusion:** service quality and servicescape are potential critical drivers of customer loyalty in GPP accredited independent pharmacies in terms of WOM, PI and PS.

Keywords: servicescape, service quality, customer loyalty, GPP accredited independent pharmacy

บทความวิจัย

ความสัมพันธ์ของภูมิทัศน์บริการและคุณภาพของการบริการต่อความจงรักภักดีของผู้รับบริการในร้านยาเดี่ยวที่ผ่านการตรวจประเมินตามหลักวิธีปฏิบัติที่ดีทางเภสัชกรรม

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บทคัดย่อ

วัตถุประสงค์: เพื่อศึกษาความสัมพันธ์ระหว่างภูมิทัศน์บริการและคุณภาพของการบริการต่อความจงรักภักดีของผู้รับบริการในร้านยาเดี่ยวที่ผ่านการประเมินตามหลักวิธีปฏิบัติที่ดีทางเภสัชกรรม (Good Pharmacy Practice: GPP) **วิธีการ:** การวิจัยนี้เป็นการสำรวจเชิงวิเคราะห์แบบตัดขวาง ผู้ตอบแบบสำรวจ คือ ผู้รับบริการที่มีอายุ 18 ปีขึ้นไปที่มารับบริการหรือซื้อผลิตภัณฑ์จากร้านยาเดี่ยวที่ผ่านการประเมินตาม GPP ซึ่งคัดเลือกมาจำนวน 8 แห่งในกรุงเทพมหานครเดือนกุมภาพันธ์ถึงเดือนกรกฎาคม 2564 ตัวอย่างตอบแบบสอบถามชนิดตอบด้วยตนเองหลังจากรับบริการ แบบสอบถามประเมินระดับความคิดเห็นต่อภูมิทัศน์บริการ คุณภาพของการบริการของร้านยาที่ผ่านการประเมินตาม GPP และความจงรักภักดีที่ประกอบด้วย 3 มิติ ได้แก่ พฤติกรรมการบอกต่อ ความตั้งใจที่จะซื้อ และความอ่อนไหวต่อราคา **ผลการวิจัย:** ผู้ตอบแบบสอบถามมีทั้งหมด 384 คน ร้อยละ 91.14 ของผู้ตอบเป็นผู้รับบริการประจำ ผู้ตอบแบบสอบถามประเมินประสบการณ์ของตนกับร้านยาโดยมีค่าเฉลี่ยของความคิดเห็นต่อภูมิทัศน์บริการและคุณภาพของการบริการที่ 4.23±0.52 และ 4.34±0.54 ตามลำดับ (จากคะแนนเต็ม 5) ภูมิทัศน์บริการโดยรวมและคุณภาพของการบริการโดยรวมมีความสัมพันธ์กับความจงรักภักดีในพฤติกรรมการบอกต่อ ความตั้งใจที่จะซื้อ และความอ่อนไหวต่อราคาอย่างมีนัยสำคัญทางสถิติ (P < 0.05) ภูมิทัศน์บริการโดยรวมมีความสัมพันธ์เชิงบวกที่อ่อนแต่มีนัยสำคัญทางสถิติกับพฤติกรรมการบอกต่อ (r = 0.33) และความตั้งใจที่จะซื้อ (r = 0.26) และมีความสัมพันธ์กับความอ่อนไหวต่อราคาในระดับความสัมพันธ์ที่ต่ำกว่า (r = 0.10) นอกจากนี้ คุณภาพของการบริการโดยรวมมีความสัมพันธ์ต่อพฤติกรรมการบอกต่อ และความตั้งใจที่จะซื้อในระดับปานกลาง (r = 0.53 และ 0.47 ตามลำดับ) และพบความสัมพันธ์ในระดับที่ต่ำต่อความอ่อนไหวต่อราคา (r = 0.31) **สรุป:** คุณภาพของการบริการและภูมิทัศน์บริการเป็นปัจจัยที่อาจใช้ขับเคลื่อนให้เกิดความจงรักภักดีของผู้รับบริการในร้านยาเดี่ยวที่ผ่านการประเมินตาม GPP ในแง่ของพฤติกรรมการบอกต่อ ความตั้งใจที่จะซื้อ และความอ่อนไหวต่อราคา

คำสำคัญ: ภูมิทัศน์บริการ คุณภาพของการบริการ ความจงรักภักดี ร้านยาเดี่ยวที่ผ่านการประเมินตามหลักวิธีปฏิบัติที่ดีทางเภสัชกรรม

Introduction

Pharmacy business in Thailand has been rapidly growing due to customer's demand. The growth of pharmacy business is also attributed to the high consumption of healthcare products, which has been driven by factors such as an increased focus on personal health and wellness, the aging of the population, the convenience offered by pharmacies, as well as urbanization (1). In 2020, the value of pharmacy business accounted for approximately 20 percent of pharmaceutical market (2) and the number of authorized licenses for running a pharmacy business in Thailand was 16,418. In Bangkok, there are 3,427 licensed pharmacies in 2020, which accounts for 21% of all pharmacies in Thailand (3).

Recently, modern pharmacies had improved the qualities according to mandatory standard on the Good Pharmacy Practice (GPP). The standard includes the requirement on appearance, practices and qualities such as temperature control in the pharmacy, rearrangement of the layout by separating pharmacist service area and counselling area (4).

Servicescape refers to the environment and contextual landscape where service providers and customer are interacted (5). Additionally, the importance of physical elements such as space, ambient conditions and artifacts significantly affected customer behaviors (5). Moreover, servicescape needs to be changed in terms of space, layout and atmosphere to comply with the GPP. When comparing the change according the GPP between independent pharmacies and chain/franchise pharmacies, independent pharmacies have disadvantages in terms of budget and business management strategies (6,7).

Pharmacy customers are now faced with various options for product quality, service quality, and competitive price due to the growing number of pharmacies. With the enforcement of the GPP for all modern pharmacies, entrepreneurs especially those in independent pharmacies should focus on building customer loyalty. All pharmacy businesses today must focus on retaining existing customers and strengthening their loyalty (8). A 5% increase in customer retention can lead to profit increasing by 25-100% (9). Therefore, independent pharmacies businesses should strive to impress their customers in order to encourage future repurchases and repeat visit (10).

Bitner highlighted that servicescape which consists of ambient condition, space and functions and sign, symbol and artifacts that affect customer attraction, repeat visits and spending (5). Service quality model developed by Parasuraman et al. or the SERVQUAL model consists of 1) tangibility or the appearance of physical facilities, equipment, personnel, and communication materials; 2) reliability or the ability to perform the promised service dependably and accurately; 3) responsiveness or the willingness to help customers and provide prompt service; 4) assurance or the knowledge and courtesy of employees and their ability to convey trust and confidence; and 5) empathy or the caring, individualized attention the firm provides its customer (11). Owing to the previous studies, improving servicescape and service quality contributed to customer loyalty (12,13). Customer loyalty consists of word of mouth (WOM), purchase intention (PI) and price sensitivity (PS) (14).

This study aimed to investigate the relationships of servicescape and service quality with customer loyalty in independent pharmacies. The information gained from this study could suggest pharmacies how to improve customer loyalty by using servicescape and service quality as drivers.

Methods

This research was a cross-sectional analytical study. The data were collected between February - July 2021 after the approval of the study proposal by the Silpakorn University Research, Innovation and Creativity Administration Committee (REC 64.0122-007-7202).

Subjects

The population of the study was the customers of GPP accredited independent pharmacies who aged over 18 years old. The sample size for correlational analysis was calculated using G*power program (15, 16). Based on a two-tailed test, an effect size of 0.20, an alpha level of 0.05, and a power of 0.80 (17-19). The calculated sample size was 193. Additional 191 subjects were recruited due to expected incomplete or low response rates for self-administered questionnaires (20). The total sample size were 384 people.

This study used a three-step sampling method. Firstly, simple random sampling was employed to select 8 districts in Bangkok out of a total of 50, with each having an equal chance of being selected. The 8 selected districts included Thonburi, Pathum Wan, Bang Na, Bangkok Noi, Yan Nawa, Bang Khun Thian, Sathorn, and Bang Kho Laem. Next, purposive sampling was used to select one GPP accredited independent pharmacy per district. The characteristics of selected pharmacies are displayed in Table 1. Then, convenience sampling was performed to choose customers in selected pharmacies who were aged over 18 years old and visited or purchased products.

Instruments

The questionnaires consisted of 4 parts. The first part was the items on general information of respondents and frequency of pharmacy visits. The second part consisted 16 questions on customers' opinions on the 3 dimensions of servicescape including ambient conditions, space and functions and sign, symbol and artifacts, developed from Bitner (5) and the GPP manual published by Thai Food and Drug Administration (FDA) (4). The third part consisted 24 questions on customers' opinions on the 5 dimensions of service quality including tangibility, reliability, responsiveness, assurance and empathy, developed from the service quality measurement in pharmacy by Bunajinda (21) as cited in Chokbumrungsuk et al. (12). Lastly, the fourth part consisted 6 questions on dimensions of customer loyalty including WOM, PI and PS, developed from Zeithaml et al. (14) and Chokbumrungsuk et al. (12). Opinions toward servicescape, service quality and customer loyalty to pharmacies were measured on a 5-points Likert scale from 1 (strongly disagree) to 5 (strongly agree).

To ensure content validity, the questionnaire was examined by three experts including a lecturer in a pharmacy school with teaching experiences on GPP standards, a pharmacist in a certified quality pharmacy, a pharmacist in GPP accredited pharmacy. Item-object congruence index (IOC) of the items ranged from 0.6 - 1, indicating good content validity. A pilot test on reliability of the scales was conducted in 30 customers

Table 1. Characteristics of 8 selected GPP accredited independent pharmacies

district	size	number of pharmacists	number of pharmacy assistants	years on business
Thonburi	medium-sized	one full time	one	more than 10 years
Pathum Wan	medium-sized	two full time	-	more than 6 years
Bang Na	large sized with two storeys	one full-time/2 part-time	two	more than 10 years
Bangkok Noi	small-sized	two full time	two	more than 5 years
Yan Nawa	small-sized	one full time	-	5 years
Bang Khun Thian	small-sized	one full time	-	less than one year
Sathorn	medium-sized	one full time	-	3 years
Bang Kho Laem	medium-sized	one full time one part-time	-	less than one year

visiting a GPP accredited independent pharmacy in Salaya, Nakhon Pathom. Cronbach's alpha coefficient were ranged from 0.82 – 0.97. The construct validity was not performed in this study. Drost highlighted that construct validity is recommended to the study that explore causal relationship between dependent and independent factors and content validity as a substantial approach for the social science research (22). However, this study focused the relationships among servicescape, service quality and customer loyalty.

Data collection

The data were collected by the researchers and 8 trained research assistants. The research assistants were trained prior to data collection to ensure accurate and consistent information. The data were collected every day in the pharmacies' operation time at 10 am to 8 pm. The researchers and trained research assistants handed the questionnaires to respondents after they received service. The respondents responded the questionnaires by themselves and instructed to carefully review each question before returning the questionnaires to the return boxes in selected pharmacies. This process helped to ensure that any missing or incomplete responses were minimized.

Data analysis

Quantitative data were analyzed using descriptive statistics. The correlations of servicescape and service quality with customer loyalty were examined using Spearman's rank correlation with statistical significance set at P<0.05. Absolute values of Spearman's correlation of 0.01-0.20, 0.21-0.40, 0.41-0.70, 0.71-0.90 and 0.91-1.0 indicate the strength of relationship from very weak, weak, moderate, strong and very strong, respectively (23).

Results

Characteristics of the subjects

384 customers participated in the study. Their characteristics are shown in Table 2. The majority of them were female (62.20%) and aged between 21-30

Table 2. Characteristics of subjects (N=384)

demographic variables	frequency	percent
gender		
male	145	37.80
female	239	62.20
age (years)		
18 - 20	29	7.60
21 – 30	121	31.50
31 - 40	88	22.90
41 – 50	71	18.50
51 – 60	48	12.50
more than 60	27	7.00
education		
primary school	15	3.90
secondary school or equivalent	140	36.40
bachelor's degree or equivalent	205	53.40
master's degree	21	5.50
doctoral degree	3	0.80
occupation		
company employees	149	38.80
business owners	65	16.90
government officers	62	16.10
university student	37	9.60
not specified	71	18.50
salary (bath/month)		
lower than 10,000	68	17.70
between 10,000 – 20,000	128	33.30
between 20,001 – 30,000	81	21.10
between 30,001 – 40,000	55	14.30
more than 40,000	52	13.50
frequency to visit any pharmacies per month		
first time to visit pharmacy	2	0.50
1-5 times	328	85.40
6-10 times	46	12.00
more than 10 times	8	2.10
frequency to visit this pharmacy per month		
first time visit this pharmacy	34	8.85
1- 5 times	323	84.11
6-10 times	24	6.25
more than 10 times	3	0.78

Table 2. Characteristics of subjects (N=384) (continued)

demographic variables	frequency	percent
last visit of this pharmacy		
first time visit	34	8.85
within 1 month	290	75.52
within 2 months	40	10.42
within 3 months	16	4.17
more than 3 months	4	1.04

years old (31.50%). Most of participants had a Bachelor's degree or equivalent (53.40%) and were company employees (38.80%). 33.3% of respondents had a monthly salary between 10,000 to 20,000 baths. The majority of participants visited the pharmacies 1-5 times per months (85.40%). Only 34 subjects were the first-time visitors of the selected pharmacies accounting for 8.56% of the subjects. In terms of last month's visit

Table 3. Overall opinions of customers toward servicescape, service quality and customer loyalty in GPP accredited independent pharmacies (n=384)

	mean±SD
servicescape	
ambient conditions	4.37±0.61
space and functions	4.11±0.53
sign, symbol and artifacts	4.24±0.63
overall servicescape	4.23±0.52
service quality	
tangibility	4.41±0.59
reliability	4.39±0.62
responsiveness	4.35±0.61
assurance	4.33±0.62
empathy	4.29±0.64
overall service quality	4.34±0.54
customer loyalty	
words of mouth (WOM)	4.29±0.61
purchase intention (PI)	4.01±0.74
price sensitivity (PS)	3.49±0.96
overall customer loyalty	3.96±0.58

**full score is 5.00

to the pharmacies, 75.52% visited the selected pharmacies within a month. (Table 2)

Servicescape, service quality and customer loyalty

From table 3, overall customers rated servicescape and service quality of the visited pharmacies were strong, with the means of 4.23±0.52 and 4.34±0.54 points out of five, respectively. Customers rated to the ambient condition, sign and symbol and artifacts and space and function of the visited pharmacies with means of 4.37±0.61, 4.24±0.63 4.11±0.53 respectively.

The findings indicate that customers rated all aspects of service quality in their visited pharmacy as high with means more than 4 (the full score of 5). The mean ratings for tangibility, reliability, responsiveness, assurance and empathy were 4.41±0.59, 4.39±0.62, 4.35±0.61, 4.33±0.62 and 4.29±0.64 out of five, respectively.

Furthermore, when asked about their behavior in response to the service received and the perceived servicescape, customers indicated a strong inclination to spread WOM (4.29±0.61), and high level of PI (4.01±0.74). However, their PS was at a moderate to high with a mean of (3.49±0.96). (Table 3)

Overall servicescape and its dimensions had a significant positive relationship with all dimensions of customer loyalty (Table 4) except for that between PS and ambient conditions (r=0.08, P=0.13) and that between PS and space and functions conditions (r=0.06, P=0.24).

Table 5 illustrates the relationship between 16 items of servicescape within pharmacies and customer loyalty. The results indicate that nearly all of the items on servicescape had a significantly positive association with WOM and PI (p<0.05). Moreover, six out of sixteen items of servicescape, specifically those on ambient aspects and sign, symbol and artifacts, exhibited a significant and positive correlation with PS with P<0.05 (Table 5).

Table 4. Spearman rank correlation coefficient between dimensions of servicescape and customer loyalty (N=384)

servicescape		customer loyalty		
		WOM	PI	PS
ambient conditions	r	0.31*	0.24*	0.08
	P	<0.001	<0.001	0.13
space and	r	0.28*	0.20*	0.06
functions	P	<0.001	<0.001	0.24
sign, symbol and	r	0.32*	0.25*	0.14*
artifacts	P	<0.001	<0.001	0.006
overall	r	0.33*	0.26*	0.10*
servicescape	P	<0.001	<0.001	0.004

r = correlation coefficient; * correlation is significant at the 0.05 level (2-tailed); WOM = word of mouth, PI = purchase intention, PS = price sensitivity

The results reveal a positive correlation between all aspects of service quality and customer loyalty as measured by WOM, PI and PS (P< 0.05) (Table 6). Service quality had a significant correlation with WOM and PI while its correlation with PS was weak. In Table 7, all items of service quality had a significant correlation with all dimensions of customer loyalty.

Discussion

384 pharmacy customers responded to the survey. 350 (91.14%) were repeat customers who would be considered as loyal customers. The customers rated their experience with pharmacies as having high levels of servicescape and service quality.

This study found that overall servicescape was positively correlated to all of the dimensions of customer

Table 5. Spearman rank correlation coefficient between 16 items of servicescape (N=384)

servicescape		customer loyalty		
		WOM	PI	PS
ambient conditions				
A1 The temperature inside the pharmacy is appropriate (the pharmacy is able to control the temperature inside the store so that customers feel the temperature is just right)	r	0.32*	0.24*	0.07
	P	<0.001	<0.001	0.16
A2 The air circulation inside the pharmacy is well-ventilated place	r	0.22*	0.18*	0.01
	P	<0.001	0.001	0.90
A3 The lighting inside the pharmacy is bright enough for reading medication labels	r	0.30*	0.24*	0.11*
	P	<0.001	<0.001	0.04
A4 There is no disruptive noise inside or outside of the pharmacy	r	0.27*	0.21*	0.03
	P	<0.001	<0.001	0.61
A5 The pharmacy is clean	r	0.30*	0.28*	0.15*
	P	<0.001	<0.001	0.004
space and functions				
A6 The pharmacy is located in an easily accessible area	r	0.21*	0.17*	0.01
	P	<0.001	0.001	0.79
A7 The pharmacy has adequate space to provide some level of privacy for customers	r	0.11*	0.04	0.07
	P	0.04	0.42	0.156
A8 There is enough distance provided inside the pharmacy for each individual customer	r	0.18*	0.12*	0.04
	P	<0.001	0.02	0.51

Table 5. Spearman rank correlation coefficient between 16 items of servicescape (N=384) (continued)

servicescape		customer loyalty		
		WOM	PI	PS
A9 The pharmacy has appropriate space allocation between the medication	r	0.27*	0.18*	0.04
dispensing area and the consultation area	P	<0.001	0.001	0.48
A10 The pharmacy has an appropriate separation of counters for medication	r	0.17*	0.13*	0.04
dispensing and consultation tables	P	0.001	0.01	0.44
A11 The products and medications inside the store are appropriately arranged,	r	0.32*	0.22*	0.09
and can be clearly identified by product categories	P	<0.001	<0.001	0.09
sign, symbol and artifacts				
A12 The name or sign of the pharmacy is clearly visible and can be observed	r	0.32*	0.28*	0.13*
from the front of the store	P	<0.001	<0.001	0.01
A13 Inside the pharmacy, there are signs indicating the categories of medications	r	0.25*	0.17*	0.01
on each shelf	P	<0.001	0.001	0.23
A14 The pharmacy has a sign displaying the name of the pharmacist providing	r	0.29*	0.22*	0.15*
service	P	<0.001	<0.001	0.004
A15 The pharmacy provides reliable educational materials that are up-to-date	r	0.24*	0.20*	0.14*
	P	<0.001	<0.001	0.005
A16 Pharmacy has all necessary tools and ready to use, they can be used	r	0.30*	0.27*	0.17*
effectively and display accurate results.	P	<0.001	<0.001	0.001

r = correlation coefficient; * correlation is significant at the 0.05 level (2-tailed); WOM = word of mouth, PI = purchase intention, PS = price sensitivity

loyalty to pharmacies. This is consistent to the results in the studies of Praditbongkotch, Vannavanit and Thanawatsakarn that physical evidences such as pharmacy layouts and pharmacy atmosphere significantly correlated to overall customer loyalty (13,24). This study showed that servicescape was correlated to three customer loyalty's behavior including WOM, PI and PS. However, relationship between servicescape and customer loyalty found in this study was weak, which was likely due to COVID-19 endemics during data collection period. Changing the pharmacy layout to ensure social distancing during endemics led to the provision of service to customers with physical barriers. This change in all pharmacies may limit the relationship of servicescape and customer loyalty.

Moreover, this research revealed that service quality was positively correlated with customer loyalty, which is consistent with that on research conducted by Kulchanachutiporn which indicated that the quality of service provided by the employees at the pharmacies affected customer loyalty (25). More specifically, the findings in this study show that while pharmacist's service quality weakly correlated to PS, it had a moderately positive relationship with WOM and PI. Therefore quality of pharmacy services may motivate customers to repeatedly use the services, eventually becoming regular customers (26).

In brief, the study suggests that service quality across all five dimensions (tangibility, reliability, responsiveness, assurance and empathy) had a considerable effect on all dimensions of customer loyalty, including WOM, PI and PS. This is also consistent with findings in previous studies conducted in pharmacies (12, 24). Furthermore, the findings in this

Table 6. Spearman rank correlation coefficient between dimension of service quality (N=384)

service quality		customer loyalty		
		WOM	PI	PS
tangibility	r	0.38*	0.33*	0.21*
	P	<0.001	<0.001	<0.001
reliability	r	0.45*	0.38*	0.25*
	P	<0.001	<0.001	<0.001
responsiveness	r	0.45*	0.42*	0.30*
	P	<0.001	<0.001	<0.001
assurance	r	0.49*	0.44*	0.29*
	P	<0.001	<0.001	<0.001
empathy	r	0.57*	0.46*	0.30*
	P	<0.001	<0.001	<0.001
overall service quality	r	0.53*	0.47*	0.31*
	P	<0.001	<0.001	<0.001

r = correlation coefficient; * correlation is significant at the 0.05 level (2-tailed); WOM = word of mouth, PI = purchase intention, PS = price sensitivity

study indicate that four dimensions of service quality including, reliability, responsiveness, assurance and empathy, had a moderately positive correlation toward WOM and PI. Conversely, tangibility had a weakly positive correlation toward all dimension of customer loyalty. The GPP accredited pharmacies should emphasize reliability, responsiveness, assurance and empathy in their service in order to gain customer loyalty.

The results indicated that servicescape had a weak positive effect on WOM and PI, but not on PS. The impact of service quality on WOM and PI was moderate, while its impact on PS was found to be low. Overall, it can be concluded that service quality has a greater correlation with customer loyalty than servicescape does.

However, there were some limitations of this study. First, COVID-19 pandemics at the time of data collection may affect result of this study due to the dramatic

Table 7. Spearman rank correlation coefficient between 24 items of service quality (N=384)

service quality		customer loyalty		
		WOM	PI	PS
tangibility				
B1 Pharmacist dresses in clean and tidy	r	0.37*	0.32*	0.12*
	P	<0.001	<0.001	0.02
B2 Employee dresses in clean and tidy	r	0.38*	0.36*	0.13*
	P	<0.001	<0.001	0.009
B3 The attire of pharmacists and employees inside a pharmacy can indicate different roles and responsibilities	r	0.32*	0.29*	0.11*
	P	<0.001	<0.001	0.03
B4 Pharmacist wears a white coat with the symbol of the Pharmacy Council during operation	r	0.28*	0.24*	0.82
	P	<0.001	<0.001	0.11
B5 Pharmacist provides advice on medication use with labels that contain complete information, including the name of the medication, indications, dosage, quantity, and clear and easy-to-understand instructions for use	r	0.34*	0.29*	0.13*
	P	<0.001	<0.001	0.01
reliability				
B6 The pharmacist dispenses medication correctly according to the disease and symptoms you have	r	0.40*	0.33*	0.16*
	P	<0.001	<0.001	0.001
B7 The pharmacist verifies and checks the type and quantity of medication before delivering the medication	r	0.42*	0.33*	0.19*
	P	<0.001	<0.001	<0.001

Table 7. Spearman rank correlation coefficient between 24 items of service quality (N=384) (continued)

service quality		customer loyalty		
		WOM	PI	PS
B8 The pharmacist serves you with honesty	r	0.43*	0.38*	0.20*
	P	<0.001	<0.001	<0.001
responsiveness				
B9 The pharmacist serves you with enthusiasm	r	0.43*	0.38*	0.20*
	P	<0.001	<0.001	<0.001
B10 The pharmacist serves you with courtesy	r	0.39*	0.38*	0.16*
	P	<0.001	<0.001	0.002
B11 The pharmacist serves you with friendliness	r	0.42*	0.38*	0.20*
	P	<0.001	<0.001	<0.001
B12 The pharmacist serves you with speed	r	0.42*	0.39*	0.16*
	P	<0.001	<0.001	0.002
assurance				
B13 A pharmacist has knowledge in dispensing medication, answering questions, and providing various recommendations	r	0.42*	0.41*	0.18*
	P	<0.001	<0.001	<0.001
B14 The pharmacist makes you feel safe and not at risk when using medication	r	0.44*	0.39*	0.18*
	P	<0.001	<0.001	0.001
B15 The pharmacist does not disclose your illness to others	r	0.45*	0.40*	0.17*
	P	<0.001	<0.001	0.001
B16 The pharmacist does not dispense unnecessary medication to you	r	0.44*	0.39*	0.23*
	P	<0.001	<0.001	<0.001
B17 The pharmacist provides valuable service for the money paid	r	0.46*	0.39*	0.23*
	P	<0.001	<0.001	<0.001
empathy				
B18 The pharmacist asks detailed questions before dispensing medication to you	r	0.44*	0.40*	0.18*
	P	<0.001	<0.001	<0.001
B19 The pharmacist provides services, information, and advice that meet your needs	r	0.45*	0.37*	0.17*
	P	<0.001	<0.001	0.001
B20 The pharmacist provides care, attention, and dedication in addressing your health issues	r	0.46*	0.41*	0.20*
	P	<0.001	<0.001	<0.001
B21 A pharmacist cares about your presentation	r	0.51*	0.41*	0.19*
	P	<0.001	<0.001	<0.001
B22 The pharmacist understands your health problems	r	0.53*	0.42*	0.23*
	P	<0.001	<0.001	<0.001
B23 The pharmacist understands your needs	r	0.54*	0.41*	0.22*
	P	<0.001	<0.001	<0.001
B24 The pharmacist understands your feelings	r	0.56*	0.34*	0.20*
	P	<0.001	<0.001	<0.001

r = correlation coefficient; * correlation is significant at the 0.05 level (2-tailed); WOM = word of mouth, PI = purchase intention, PS = price sensitivity

change in servicescape, and service quality. Some of pharmacies provided services outside the pharmacy during that time period. Even though most of participants were the repeat customer who obtained pharmacy service inside the stores. Change of care provision may affect the survey result. Future research should collect data on this topic under a normal practicing condition. This research also collected data from a limited number of pharmacies. Therefore, further research should be conducted in pharmacies from all districts in Bangkok to ensure the generalization. This research was a correlation analysis. Further research should be conducted by using multivariate analysis to control confounding variables.

Conclusions

The present study revealed that servicescape and service quality are factors significantly correlated to customer loyalty in GPP accredited independent pharmacy. Servicescape had a weakly positive but significant correlation to WOM and PI. However, it had no significant correlation to PI. Service quality showed a moderate and positive correlation to both WOM and PI. Also, it showed a weak and positive correlation to PS. These results suggest that service quality and servicescape may be potential drivers of customer loyalty. GPP accredited independent pharmacy can benefit from positive WOM, PI and PS.

Acknowledgements

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