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## THE ROLE OF PHARMACIST ATTITUDE, MEDICATION SUPPLY, LOCATION, AND PRICE FAIRNESS IN IMPROVING PHARMACY PERFORMANCE

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### ABSTRACT

*This study aims to analyze the influence of pharmacist attitude, medication supply, pharmacy location, and price fairness on customer satisfaction and its impact on pharmacy performance in independent pharmacies. In conducting testing of these variables, the researcher distributed questionnaires to 345 respondents who had visited, consulted with pharmacists or pharmacy staff, and purchased medication at the pharmacy, using a Modified Likert scale. The sample was collected using a purposive sampling method. Data analysis was conducted using the Structural Equation Model (SEM) Smart PLS. The results of the study indicate that pharmacist attitude, medication supply, pharmacy location, and price fairness have a significant direct impact on pharmacy performance. Furthermore, pharmacist attitude, medication supply, pharmacy location, and price fairness have a significant direct impact on customer satisfaction. Customer satisfaction has a significant direct impact on pharmacy performance. Customer satisfaction also mediates the effect of pharmacist attitude, medication supply, pharmacy location, and price fairness on pharmacy performance.*

**Keywords:** *Pharmacist Attitude, Medication Supply, Price Fairness, Customer Satisfaction, Pharmacy Performance*

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### 1. INTRODUCTION

Pharmacies are the main line of the supply chain and have an important role in the health sector in Indonesia (Widi, 2022). More than 24% of pharmaceuticals produced are distributed through

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pharmacy stores. The number of pharmacies is also increasing frequently each year. This is due to increasingly complex health problems and an increasing population in Indonesia (Sampurno, 2011). Pharmacies are a place to distribute good and accurate medicines and health care equipment to the public (Guhl et al., 2019).

In Indonesia, there are five main types of pharmacies: independent pharmacies, chain pharmacies, hospital pharmacies, online pharmacies, and franchise pharmacies (franchise pharmacy). However, independent pharmacies face significant challenges in sustaining and competing with network pharmacies, franchise pharmacies, and online pharmacies (Grand View Research, 2020). One of the main challenges is price competition, in which network pharmacies and franchises can offer more competitive prices due to the scale of the economy and access to large discounts from drug manufacturers (Guhl et al., 2019). In addition, the change in consumer preferences to online services has further increased the pressure on independent pharmacies. Data from Statista show that online health spending in Indonesia increased by 45% in 2022 compared to the previous year, reflecting a shift in consumer behavior toward online shopping. Another problem is the lack of consumer recognition and loyalty to independent pharmacies. Many independent pharmacies are less familiar to the public due to their less strategic location, limited promotions, or innovations in service that are not yet optimal. As a direct public health provider, independent pharmacies are also faced with higher expectations of the consumer regarding quality of care, such as staff friendliness, availability of medicine, strategic locations, fair prices, and speed of service (Yaseen et al., 2018). The decline in patients' satisfaction with these aspects can have a negative impact on the performance of pharmacies, including consumer loyalty and volume of sales (Barghouth et al., 2021). This is the gap phenomenon that will be determined in this study.

Nowadays, pharmacies are rapidly growing with a greater focus on patient needs, not merely as a supplier of medicines. By extending operational hours and offering expert consultations without appointment, pharmacies are becoming more accessible than hospitals (Barghouth et al., 2021). A growing number of pharmacies have increased competition for attracting and retaining patients (Ghattas and Al-Abdallah, 2020). For that, pharmacies need to be responsible for the quality of service that is delivered. Increasing patient satisfaction has been key to promoting buying and upping pharmacy performance (Yaseen et al., 2018). Because pharmacies directly interact with patients, management needs to ensure that patients are satisfied with the care provided. Factors such as drug consultation, pharmacist attitudes, availability of medicine, pharmacy locations and reasonable prices can influence patient satisfaction and their decision to keep choosing pharmacies. In areas with much competition, pharmacies face the challenge of maintaining excellence by providing high quality care, since patients can easily switch to another pharmacy (Guhl et al., 2019).

Theoretically there are several factors that affect pharmacy performance in pharmacies including pharmacist attitude, medication supply, pharmacy location, price fairness and customer satisfaction. Various previous studies have identified factors that influence pharmacy performance. The results of this study, however, show differences in the influence of exogenous variables such as pharmacist attitude, medication supply, location, and price fairness on pharmacy performance. For example, Barghouth et al. (2021) revealed that the availability of medicines, pharmacist attitudes, and speed of service had a significant impact on pharmacy performance, while Guhl et al. (2019) highlights the importance of personal interaction to increase patient loyalty. Another study, as Chowdhury et al. (2017), stresses the role of accessibility and affordable prices in boosting the performance of pharmacies, whereas Mahmoud et al. (2016) placed more emphasis on the speed of service and the quality of communication from the staff of pharmacies.

Additionally, findings on the effect of pharmacy locations on pharmacy performance also vary. El Hajj et al. (2011) identified the location as a major factor in the selection of pharmacies, but Merks et al. (2014) found that location factors were less relevant in some states such as Poland. This difference in research result reflects inconsistency in exogenous variables' influence on the pharmacy performance in various geographic and demographic contexts. This study aims to fill gaps by identifying key factors and their impact on pharmacy performance through customer satisfaction at independent pharmacies in Indonesia. Because of the **research gap** mentioned above, researchers have tested the influence of the "Pharmacist attitude, Medication Supply, Location, Price Fairness on Pharmacy Performance with Customer Satisfaction as a Mediating Variable."

## 2. LITERATURE REVIEW

### **Pharmacy Management**

Guhl et al. (2019) suggests that to maintain competitive advantage, pharmacies need to focus on the relevant pharmaceutical service elements, especially personal interaction between pharmacists and patients. Khudair and Raza (2013) found that the patient's satisfaction is influenced by several factors including speed of care, pharmacist attitudes, medical counseling, pharmacy locations, and the comfort of waiting rooms. Meanwhile, Barghouth et al. (2021) show that pharmacy locations have no significant impact on customer satisfaction; more contributing factors are medicinal supply, pharmacist attitudes, and education about medications. Chowdhury et al. (2017) found that patients were more satisfied with the easy and close-up access to the pharmacy, as well as the availability of medicine, affordable prices,

convenient operating hours and a short waiting time. In a study by Márquez-Peiró et al. (2008), it was discovered that patient's satisfaction is influenced by pharmacist expertise in helping to resolve their problems. Merks et al. (2014) It is shown that customer service is the main factor that patients consider when choosing pharmacies in England. El Hajj et al. (2011) concluded that the location of the pharmacy was an important factor in the patient's selection of pharmacies, followed by the availability of medicines, quality of services, business hours, speed of service, and knowledge of pharmacists. Nuritasari (2015) noted that patients were highly satisfied based on the performance and hospitality of pharmacy staff, as well as the drug price and speed of the cash register. Mahmoud et al. (2016) found that the locations of pharmacies, the quality of pharmacy staff, and the competence of pharmacists in explaining drug use were the most influential factors of patient satisfaction. Based on these reviews, researchers chose six factors for pharmacy services including pharmacist attitude, medication supply, location and price fairness (a pharmacy's propriety).

### **Pharmacist Attitude**

Pharmacist attitude refers to the pharmacist's willingness and cleverness to understand a patient's medical case, assisting patients with obtaining the medication, and answering the questions asked by the patient. According to a study conducted by Khudair and Raza (2013), pharmacists have a significant role to play in increasing patient satisfaction with pharmaceutical care in public hospitals in Qatar. A friendly, professional, caring attitude toward pharmacists may enrich the patient's experience and shape positive perceptions of the quality of pharmaceutical care. The results show that pharmacist attitudes positively influence patient satisfaction, which means that when pharmacists exhibit a friendly and friendly attitude, the patient's satisfaction with pharmaceutical treatment increases (Khudair and Raza, 2013).

### **Medication Supply**

Medication supply involves the availability of various types of medications, both free, limited and prescribed, in sufficient quantities at pharmacies, and ensuring they are labeled and of good quality and appearance. Research by Khudair and Raza (2013) shows that the availability of medicines has a positive correlation with several pharmaceutical services factors, including pharmacies and medication teaching.

### **Pharmacy Location**

Pharmacy location (pharmacy location) refers to the ease of discovering pharmacies, the availability of adequate parking spaces, and the proximity of pharmacies to patients' homes, hospitals, and workplaces (Barghouth et al., 2021). In a study done by El Hajj et al. (2011), the location of the pharmacy is defined as the physical location or geographical location of the

pharmacy. Research findings indicate that the location of pharmacies is the main factor influencing decisions made by respondents in choosing a particular pharmacy. Therefore, accessibility to pharmacies, including range, availability of transportation, and existence in easily accessible environments, has become an important consideration for patients in choosing pharmacies (El Hajj et al., 2011).

### **Price Fairness**

Price fairness is defined as the consumer's perception of price justice, i.e. whether the perceived difference in socially acceptable price compared to other parties is reasonable, acceptable or accountable (Matzler et al., 2007). According to Xia et al. (2004), fair pricing affects customer satisfaction and loyalty. When consumers feel that their pricing is fair, they tend to be more satisfied and loyal to their provider, which indicates a positive relationship between the price fairness and customer satisfaction and customer retention.

### **Customer Satisfaction**

Patient satisfaction is defined as the alignment between patients' expectations of healthcare services and their actual experiences (Abekah-Nkrumah et al., 2020). There is no measurement to assess patient satisfaction in all pharmacy situations. Therefore, a theoretical basis is needed to evaluate satisfaction, where the validity of a measure can be assessed. These measures must fit the overall research framework, and researchers need to have a clear understanding of what to measure (Schommer & Kucukarslan, 1997). Patient satisfaction is a function of several aspects, including satisfaction with pharmacy staff and waiting time (Aragon & Edwards, 2004). By understanding these components, pharmacy managers can focus more on improving the care of these factors, which can increase patient satisfaction and strengthen pharmacy sustainability (Lang & Fullerton, 1992).

### **Pharmacy Performance**

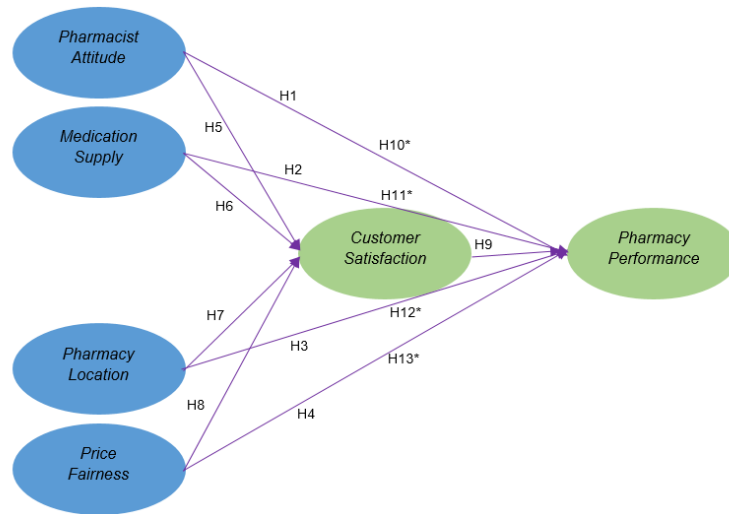
In this study, pharmacy performance is defined as the overall capability of pharmacies in meeting patient expectations, which can be measured through patient loyalty. In the context of strict business competition, pharmacies need to continue to improve the quality of their services to improve their pharmacy performance (Ghattas and Al-Abdallah, 2020). Therefore, to keep competing in the market, pharmacies must build patient confidence and create high pharmacy performance.

### **Research Model**

Based on the results of the above study, good pharmacy performance is highly determined by pharmacy teaching factors such as medication teaching, service promptness,

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pharmacist attitude, medication supply, location and price fairness, all of which are important factors in determining the pharmacy performance mediated by customersatisfaction.



**Figure 1. Research Model**

Note: H10\*, H11\*, H12\*, H13\*: Mediation Testing

Based on the above formulation of the problem, the hypothesis of this research is as follows:

## 1. The influence of Pharmacist Attitude on Pharmacy Performance

In this study, it was found that pharmacists who displayed mindfulness and empathy during consultation could increase patient satisfaction and their loyalty to pharmacies. By considering the above findings, the following hypothesis can be proposed in this research:

**H1:** Pharmacist Attitude significantly affects Pharmacy Performance.

## 2. The Influence of Medication Supply on Pharmacy Performance

Research by Cohen et al. (2020) demonstrates that the availability and completeness of a medicine stock is an important factor affecting customer satisfaction and loyalty. Their findings suggest that pharmacies with a comprehensive supply of medication tend to have higher levels of customer satisfaction and are more capable of maintaining customers. Based on these findings, the following hypothesis can be proposed:

**H2:** Medication supply significantly affects Pharmacy Performance.

## 3. The influence of Pharmacy Location on Pharmacy Performance

Research by Paola et al. (2021) shows that pharmacies close to community centers, such as shopping malls, schools, and housing, can increase number of visits and purchases. The finding indicates that strategic pharmacies tend to have higher sales and better customer satisfaction. In addition, research by Campbell et al. (2020) emphasizes the importance of pharmacy locations in the context of competition. Pharmacies located in areas with few

competitors have greater opportunities to attract and retain customers. Based on these findings, the following hypothesis can be proposed:

**H3:** Pharmacy location significantly impacted Pharmacy Performance.

#### **4. The influence of Price Fairness on Pharmacy Performance**

Research by Kim & Lee (2020) suggests that fair and transparent prices have a crucial role in shaping consumer perception of pharmacies. The finding indicates that pharmacies that implement fair and clear price policies are more likely to have a higher level of customer satisfaction, which in turn increases the business performance. Perceptions of pricing justice can influence purchasing behavior. If consumers feel that the price offered is proportional to the value of a received product or service, they are more likely to purchase and recommend pharmacies to others. It showed that pricing justice is an important factor in attracting and sustaining customers, which has a positive impact on the performance of pharmacies. Therefore, the hypothesis for this research can be proposed as follows:

**H4:** Price fairness significantly affects Pharmacy Performance.

#### **5. Influence of Pharmacist Attitude on Customer Satisfaction**

Research by Barghouth et al. (2021) demonstrates that pharmacists' attitudes have a significant influence on customer satisfaction. This finding suggests that pharmacists who are able to develop a solid professional relationship with patients are likely to increase customer satisfaction. Therefore, it is important that pharmacists develop relationships with patients based on trust, bi-directional communication, and mutual respect to increase patient satisfaction. Therefore, the hypothesis for this research can be proposed as follows:

**H5:** Pharmacist attitude significantly affects Customer Satisfaction.

#### **6. The Influence of Medication Supply on Customer Satisfaction**

Research by Barghouth et al. (2021) indicates that medication supply has the most significant influence on customer satisfaction over other factors, such as pharmacist attitudes, speed of care and counseling. This finding stresses the importance for pharmacy managers to understand that patients have a tendency to choose to acquire all necessary medicines from a pharmacy. The unavailability of certain types of medicines can cause patients to cancel purchases and shift to other pharmacies. As such, the hypotheses proposed in this research are:

**H6:** Medication supply has a significant effect on Customer Satisfaction.

#### **7. The influence of Pharmacy Location on Customer Satisfaction**

Research by Khan et al. (2013) demonstrating that the location of the pharmacy was instrumental in influencing the patient's choice, whereas respondents tended to prefer the pharmacy that was close to their home. The finding is in line with the research by Kevredikis et

al. (2018), who also found that pharmacies had a positive influence on patients' decisions to choose pharmacies. As such, the hypotheses proposed in this research are:

**H7:** Pharmacy location significantly influenced Customer Satisfaction.

#### **8. The influence of Price Fairness on Customer Satisfaction**

Research by Angelica et al. (2023) found that price fairness statistically has a positive effect on patient satisfaction. Similar findings are presented by Nuritasari (2015), which shows that patients reach a high level of satisfaction due to factors such as medication price, hospitality for pharmacies, and the speed of checkout services. Therefore, the hypotheses that can be proposed in this study are:

**H8:** Price fairness significantly impacted Customer Satisfaction.

#### **9. Influence of Customer Satisfaction on Pharmacy Performance**

Angelova & Zekiri (2011) showed that customer satisfaction is correlated with other patients' buying behavior, loyalty, and positive testimonies. This finding is consistent with studies by Barghouth et al. (2021), which found that customer satisfaction was significantly and positively affecting pharmacy performance. The higher the patient's satisfaction, the more likely they are to exhibit behaviors that support pharmacies, including giving a positive testimony and increasing the volume and frequency of purchase. This ultimately contributed to the long-term success of the pharmacy business. Based on these findings, the hypotheses that can be proposed in this study are:

**H9:** Customer satisfaction significantly impacted Pharmacy Performance.

#### **10. Customer Satisfaction's Mediation Role on the influence of Pharmacist Attitude towards Pharmacy Performance**

Khudair and Raza (2013) found that pharmacist attitude has a positive effect on customer satisfaction. The finding is in line with previous research by Kamei et al. (2001), which also asserts the importance of pharmacist attitudes in increasing consumer satisfaction. In addition, Barghouth et al. (2021) indicates that the pharmacist attitude contributes significantly to customer satisfaction, which in turn has a positive relationship with pharmacy performance. Based on these research results, the hypotheses that can be proposed in this study are:

**H10:** Customer satisfaction mediates the influence of Pharmacist Attitude on Pharmacy Performance.

#### **11. Customer Satisfaction's Mediation Role on the influence of Medication Supply of Pharmacy Performance**

Barghouth et al. (2021) indicates that medication supply contributes significantly to customer satisfaction, and customer satisfaction also contributes significantly positively to performance. Additionally, research by Oparah and Kikanme (2006) indicated that patients in



Nigeria were most satisfied with the availability of the original medication and the clear label of medications. Based on these findings, the hypothesis that can be proposed in this study is:

**H11:** Customer satisfaction mediates the influence of the Medication Supply on Pharmacy Performance.

### **12. Customer Satisfaction's Mediation Role on the influence of Location on Pharmacy Performance**

Khudair and Raza (2013) showed that pharmacy location has a significant positive connection to customer satisfaction. The finding is consistent with research conducted by Kamei et al. (2001). In addition, Barghouth et al. (2021) found that customer satisfaction exerted a significant positive influence on pharmacy performance. Based on these findings, the hypothesis that can be proposed in this study is:

**H12:** Customer satisfaction mediates the influence of Pharmacy Location on Pharmacy Performance.

### **13. Customer Satisfaction's Mediation Role on the influence of Price Fairness against Pharmacy Performance**

Guhl et al. (2019) found that price fairness had a significant positive influence on perceived customer value, and that perceived customer value also contributed positively to customer satisfaction. In addition, Barghouth et al. (2021) it is revealed that customer satisfaction has had a positive effect on the pharmacy performance. Based on this research result, the hypotheses that can be proposed in this study are:

**H13:** Customer satisfaction mediates Price Fairness's influence on Pharmacy Performance.

## **3. RESEARCH METHODOLOGY**

This study adopts a quantitative method for analyzing data. Quantitative data is categorized using tables, which makes it easier to analyze statistics through SPSS. Data collection was done by distributing questionnaires to patients who had visited, consulted about medications with pharmacists or pharmacies, and purchasing medicines at pharmacies. The questionnaire was distributed from February to March 2024. The sampling technique is a non-probability sampling with a purposive sampling approach and the total sample numbers in this study are 345 respondents.

To measure the variables in this study, the researcher applied a Modified Likert Scale, consisting of six choices. In contrast to the classic Likert scale, these scales do not provide a neutral option, and thus respondents are asked to choose their preferred answers. There were six options for answers: "strongly agree", "agree", "somewhat agree", "somewhat disagree",

"disagree", and "strongly disagree." Using Modified Likert Scale to reduce the central tendency bias by forcing respondents to choose answers closer to their actual opinions. This allowed researchers to obtain more accurate data and better reflect respondents' preferences or opinions (Hartley, 2010).

### Statistical Hypothesis Testing

A Test Hypothesis uses the Structural Equation Model (SEM) - a multivariate analysis of data to examine the relationships between variables. The study used a Smart PLS version 3 software.

## 4. RESULTS AND DISCUSSIONS

### Characteristics of Respondents

This study used a sample of 345 respondents, namely all who have visited and have purchased pharmacies in the Greater Jakarta area and outer Greater Jakarta. The results of respondent's responses to characteristics based on sex, domicile, age, recent education and employment are listed in the following table:

**Table 1. Characteristics of Respondents**

Characteristics Of Respondents	Number of Respondents	Percentage
<b>Sex</b>		
Male	118	34.2%
Female	227	65.8%
<b>Domicile</b>		
Greater Jakarta	341	98.8%
Outer Jabodetabek	4	1.2%
<b>Age</b>		
< 20 years	1	0.3%
20 - 30 years old	252	73%
31 - 40 years	77	22.3%
41 - 50 years	12	3.5%
> 50 years	3	0.9%
<b>Education</b>		
High School	147	42.6%
Diploma	17	4.9%
Bachelor's Degree (S1)	133	38.6%
Master (S2)	47	13.6%
Doctor (S3)	1	0.3%
<b>Employment</b>		
Private employee	110	31.9%
Civil servant	90	26.1%

Characteristics Of Respondents	Number of Respondents	Percentage
Entrepreneur	46	13.3%
Students/ Students	47	13.6%
Housewife	48	13.9%
Retiring/ Not Working	4	1.2%

### Validity, Reliability and Multicollinearity Tests

A small sample appliance test (n= 30) of validity test scores and reliability was performed before a large sample was carried out:

**Table 2. Validity Test Results (n= 30)**

Random variable	Variable Code	Pearson Correlation	Sign.	Description
<b>Pharmacist Attitude</b>	PA1	0.903	<0,001	Valid
	PA2	0.871	<0,001	Valid
	PA3	0.767	<0,001	Valid
	PA4	0.761	<0,001	Valid
	PA5	0.827	<0,001	Valid
<b>Medication Supply</b>	MS1	0.952	<0,001	Valid
	MS2	0.849	<0,001	Valid
	MS3	0.683	<0,001	Valid
	MS4	0.749	<0,001	Valid
	MS5	0.783	<0,001	Valid
<b>Pharmacy</b>	PL1	0.974	<0,001	Valid
	PL2	0.945	<0,001	Valid
	PL3	0.851	<0,001	Valid
<b>Price Fairness</b>	PF1	0.916	<0,001	Valid
	PF2	0.880	<0,001	Valid
	PF3	0.763	<0,001	Valid
<b>Customer Satisfaction</b>	PS1	0.917	<0,001	Valid
	PS2	0.777	<0,001	Valid
	PS3	0.837	<0,001	Valid
	PS4	0.851	<0,001	Valid
<b>Pharmacy Performance</b>	PP1	0.915	<0,001	Valid
	PP2	0.790	<0,001	Valid
	PP3	0.852	<0,001	Valid
	PP4	0.831	<0,001	Valid
	PP5	0.869	<0,001	Valid

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**Table 3. Reliability Test Results (n = 30)**

Random variable	Cronbach's Alpha Value	Conclusion
Pharmacist attitude	0.877	Reliable
Medication supply	0.864	Reliable
Pharmacy location	0.910	Reliable
Price fairness	0.815	Reliable
Customer satisfaction	0.861	Reliable
Pharmacy location	0.895	Reliable

A partial least square (PLS) test is a validity test based on the loading factor values of each construction. Meanwhile multicollinearity test demonstrates the existence of a strong relationship between the variables being tested. Multicollinearity test aims to test whether the regression model is found to be a correlation between the free variables (exogenous). For VIF values it can be said that there is no problem when they have the value < 0.05. Table 4 shows the results of statistic and VIF collinearity tests.

**Table 4. Operational Variable Definitions & Results for Convergent Validity and VIF**

**Analysis**

Random variable	Code	Indicator	Source	Outer Loading Value	AVE	VIF	Description
<b>Pharmacist Attitude (PA)</b>	PA1	The pharmacy officials carefully answered my questions	Barghouth et al. (2021)	0.930	0.716	4,388	Valid
	PA2	Pharmacies are helping me solve my problems when I'm on medication		0.834		2,296	Valid
	PA3	The pharmacy official helped me to get the medicine I needed		0.797		1,974	Valid
	PA4	The pharmacy officials understand the medical cases I'm talking about		0.805		2,130	Valid
	PA5	The pharmacy official treated me well		0.856		2,664	Valid
<b>Medication Supply (MA)</b>	MS1	All the medicine I need is available in the pharmacy	Khudair and Raza (2013)	0.928	0.692	4,167	Valid
	MS2	The name of the drug is clearly spelled on the package either prescription or prescription medications are (without prescription)		0.748		1,748	Valid
	MS3	Instructions on the drug are explicit		0.806		2,049	Valid
	MS4	The quality of both prescription and dietary (without prescription) medicines is good		0.811		2,167	Valid
	MS5	The drug variations available in this pharmacy are adequate to meet the needs of my medicine		0.857		2,630	Valid
<b>Pharmacy Location (PL)</b>	PL1	Pharmacy sites are easy to find	Barghouth et al. (2021)	0.931	0.806	3,113	Valid
	PL2	There is ample parking space in the pharmacy		0.895		2,589	Valid

Random variable	Code	Indicator	Source	Outer Loading Value	AVE	VIF	Description
Price Fairness (PF)	PL3	The pharmacy is close to my home		0.867		2,122	Valid
	PF1	The price of the medicine I paid for was reasonable	Matzler et al. (2007)	0.925	0.804	2,961	Valid
	PF2	Pharmacies don't use me at unreasonable prices		0.891		2,479	Valid
Customer Satisfaction (PS)	PF3	Drug prices in pharmacies as a whole are reasonable	Angelica et al. (2023)	0.874		2,156	Valid
	PS1	I am satisfied with the medications I received at this pharmacy	Barghouth et al. (2021)	0.937	0.730	4,113	Valid
	PS2	I am satisfied with the experience of shopping at this pharmacy		0.782		1,825	Valid
	PS3	Shopping at the pharmacy is a fun experience for me		0.820		2,036	Valid
Pharmacy Performance (PP)	PS4	I feel better after talking to the pharmacy official		0.870		2,682	Valid
	PP1	I will continue to shop for medicine from this pharmacy	Barghouth et al. (2021)	0.900	0.667	3,147	Valid
	PP2	I consider myself faithful to this apothecary		0.710		1,559	Valid
	PP3	This pharmacy became my main choice when I went to buy medicine		0.773		1,747	Valid
	PP4	I'll give you a positive testimony about this pharmacy		0.852		2,418	Valid
	PP5	If my friends are looking for a pharmacy, I would encourage them to try and do some shopping at one of these dispensaries		0.836		2,189	Valid

Table 4 shows the results of a convergence validity analysis test that includes values from outer loading and AVE. In the loading value of all reflective constructs above 0.70, it can be said to be valid. In collinearity test results it can be inferred that all VIF values are below 5.00 (VIF < 5.00) which means there is no multicollinearity problem in testing the model.

**Reliability Test**

Based on the PLS method, the reliability of indicators in this research is determined by the value of composite reliability and cronbach's alpha for each block of indicator. Rule of thumb the value of alpha or composite reliability must be greater than 0.70. Table 5 shows the results of cronbach's alpha and composite reliability tests in the study.

**Table 5. Cronbach Alpha Test Results and Composite Reliability**

Random variable	Cronbach's Alpha	Composite Reliability	Rule of Thumbs
Pharmacist Attitude	0.900	0.926	> 0.7
Medication Supply	0.887	0.918	> 0.7
Pharmacy	0.880	0.926	> 0.7
Price Fairness	0.878	0.925	> 0.7
Customer Satisfaction	0.875	0.915	> 0.7
Pharmacy Perfomance	0.874	0.909	> 0.7

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Cronbach's alpha and composite reliability tests show all the values of the variable meet the requirements in minimum testing and reliable values so that they can be used in hypothesized sales

**Inner Model Test with Determination Coefficient Test, F Square Test and Goodness of Fit Test**

The inner model evaluations are conducted by looking at determination coefficients, taking the F square test and goodness of fit test as follows:

**Table 6. Results Output Value R2**

	Square R	R Square Adjusted
Pharmacy Performance	0,906	0,904
Customer Satisfaction	0,903	0,902

The R-square value of the Customer Satisfaction variable is 0.903. This suggests that 90.3% of Customer Satisfaction variables may be influenced by the Pharmacist Attitude, Medication Supply, Pharmacy Location and Price Fairness, while the remaining 9.7% are influenced by variables outside of the research. Along with the Pharmacy Performance variable, it is 0.906 that 90.6% of Pharmacy Performance variables can be influenced by the Pharmacist Attitude, Medication Supply, Pharmacy Location, Price Fairness, Pharmacist Attitude through Customer Satisfaction, Medication Supply via Customer Satisfaction, Pharmacy Location through Customer Satisfaction and Payment Price Fairness through Customer Satisfaction, while the remaining 9.4% is influenced by unscrutinized variables.

**Table 7. Outputs F<sup>2</sup> Mediated Variables & Endogenous Variables**

	Customer Satisfaction	Pharmacy Performance
Pharmacist Attitude	0,064	<b>0,010</b>
Medication Supply	0,058	0,024
Pharmacy	0,052	0,026
Price Fairness	<b>0,106</b>	0,041
Customer Satisfaction	-	<b>0,162</b>

The value of F square of the variable pharmacist attitude, medication supply, pharmacy location and price fairness against customer satisfaction is greater than 0.02 in that it has little influence. The variable pharmacist attitude towards the pharmacy performance has a value of F square being less than 0.02, which indicates that the variable has no effect. The pharmacy location, price fairness, and medication supply variable has a value of F square greater than 0.02, which indicates a small effect on the pharmacy performance. Meanwhile, customer

satisfaction variable has a value of F square which is greater than 0.15 means it has a moderate or sufficient influence on pharmacy performance.

**Table 8. Output Results SRMR and NFI values**

	Saturated Model	Estimated Model
SRMR	0,045	0,045
NFI	0,878	0,878

The SRMR value for the proposed model was 0.045 for both models (Saturated Model and Estimated Model), which were below the 0.08 limit. This suggests that the proposed model has excellent fit with the data gathered. That is, the difference between the correlations observed and predicted by the model is small, suggesting that the model can well represent relationships between variables in research.

**Hypothesis Tests**

Testing of the hypothesis between constructs is performed by the method of bootstrap resampling. A hypothetical test calculation using SmartPLS 3.

**Table 9. Direct and Indirect Effect Results**

Characteristics	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values values values
MS -> PP	0,153	0,155	0,064	2,392	<b>0,017</b>
MS -> PS	0,236	0,237	0,063	3,724	<b>0,000</b>
PA -> PP	0,106	0,109	0,052	2,017	<b>0,044</b>
PA -> PS	0,261	0,266	0,064	4,061	<b>0,000</b>
PF -> PP	0,187	0,188	0,053	3,526	<b>0,000</b>
PF -> PS	0,290	0,282	0,056	5,154	<b>0,000</b>
PL -> PP	0,140	0,143	0,051	2,724	<b>0,007</b>
PL -> PS	0,195	0,196	0,054	3,605	<b>0,000</b>
PS -> PP	0,398	0,389	0,086	4,647	<b>0,000</b>
MS -> PS -> PP	0,094	0,091	0,030	3,166	<b>0,002</b>
PA -> PS -> PP	0,104	0,103	0,034	3,085	<b>0,002</b>
PF -> PS -> PP	0,115	0,109	0,030	3,843	<b>0,000</b>
PL -> PS -> PP	0,078	0,078	0,033	2,369	<b>0,018</b>

Description:

- PA : Pharmacist attitude
- MS : Medication supply
- PL : Pharmacy location
- PF : Fairness price
- CL : Customer satisfaction
- P : Pharmacy performance

In Table 9, the results of the test are presented using the SmartPLS software, which aims to evaluate the related hypothesis of direct effect and indirect effect in this study. The results of

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the direct effect table show that of the nine hypotheses tested, all were accepted. This hypothesis included a link between medication supply for pharmacy performance, medication supply for customer satisfaction, pharmacist attitude towards pharmacy performance, pharmacist attitude towards customer satisfaction, price fairness against pharmacy performance, price fairness against customer satisfaction, pharmacy location versus pharmacy performance, pharmacy location location versus customer satisfaction, and customer satisfaction over pharmacy performance. On the indirect effect table, four hypotheses are also accepted. Table 6 provides an overall summary of the results of the hypothesis test.

**Table 10. Hypothesis Test**

	<b>Hypothesis</b>	<b>Significance</b>	<b>T Stats</b>	<b>Conclusion</b>
H1	Pharmacist attitude towards pharmacy performance	0.044	2.017	Accepted
H2	Medication supply of pharmacy performance	0.017	2.392	Accepted
H3	Pharmacy location of pharmacy performance	0.007	2.724	Accepted
H4	Price fairness against pharmacy performance	0.000	3.526	Accepted
H5	Pharmacist attitude towards customer satisfaction	0.000	<b>4.061</b>	Accepted
H6	Medication supply for customer satisfaction	0.000	3.724	Accepted
H7	Pharmacy location on customer satisfaction	0.000	3.605	Accepted
H8	Price fairness versus customer satisfaction	0.000	<b>5.154</b>	Accepted
H9	Customer satisfaction versus pharmacy performance	0.000	<b>4.647</b>	Accepted
H10	Customer satisfaction mediates the influence of the Pharmacist Attitude towards Pharmacy Performance	0.002	3.085	Accepted
H11	Customer satisfaction mediates the effect of medication supply on pharmacy performance	0.002	<b>3.166</b>	Accepted
H12	Customer satisfaction mediates the influence of pharmacy location on pharmacy performance	0.018	2.369	Accepted
H13	Customer satisfaction mediates the influence of price fairness on pharmacy performance	0.000	<b>3.843</b>	Accepted

The research model examined direct and indirect influences, and the study found that Pharmacist Attitude, Medication Supply, Pharmacy Location and Price Fairness had a direct influence on Pharmacy Performance. Pharmacist Attitude, Medication Supply, Pharmacy Location and Price Fairness were found to have an indirect effect on Pharmacy Performance through Customer Satisfaction. Customer Satisfaction has had a direct influence on Pharmacy Performance. This means that the management of pharmacies needs to take into account several factors, especially the pharmacists' and pharmacy officials' attitudes towards patient service, the comprehensiveness of medication, reasonable pricing, and pharmacy locations, as these factors have been directly affecting patient satisfaction and pharmacy performance.



This study revealed that pharmacists' attitudes, availability of medicines, pharmacy locations and price obligations had a direct impact on patient satisfaction, and that in the end it would have a significant impact on apothecary's performance. The managerial implications of the research reflect the importance of pharmacy management to focus on a number of key areas for improving patient satisfaction and overall business performance.

**Pharmacist attitude** is professional, friendly, and responsive in building positive relationships with patients. Management must ensure that pharmacists receive ongoing training in communication skills and customer service. The positive attitude of pharmacists not only increases patient satisfaction but also improve pharmacy performance and recommends pharmacy services to others. This is in line with the research done by Barghouth et al. (2021), which states that apothecaries' professional attitudes increase customer satisfaction and loyalty.

Adequate **Medication Supply** should be a top priority. Management needs to optimize supply chains and inventory systems to ensure that medicines are always available in patient demand. This can be achieved through careful stock monitoring and a strong relationship with suppliers. The consistent availability of medications reduces patient frustration and increases their confidence in pharmacies. The results of the study are in line with Cohen et al. (2020), which stresses the importance of medicine being available in building patient confidence.

**Pharmacy Location** has a strategic role in attracting and sustaining consumers. Management should consider accessibility factors, such as being close to a health center, housing area, or public transport. Its easy-to-reach location increases comfort for patients, contributing to higher frequency visits and increased sales. It is in line with Khan et al. (2013), which shows that strategic locations affect the frequency of visits.

**Price Fairness** was a key factor in building patient confidence and satisfaction. Management should ensure that the price offered is competitive and transparent, as well as offering discount programs or special prices for patients in need. A fair pricing boosts perceptions of service value and motivates the patient to continue shopping at the pharmacy. It is in line with Angelica et al. (2023), which states that fair prices improve the perception of value and loyalty of subscribers.

The implication of these findings **in the context of independent pharmacies** is that price fairness is the most influential factor in customer satisfaction, followed by pharmacy attitude, medication supply, and pharmacy location. Price fairness is a major factor because consumers at independent pharmacies are more concerned with price fairness than at large or online pharmacies. Pharmacist attitudes are also important because personal interaction can influence the customer experience directly. The availability of adequate, quality medicines supports

satisfaction but may be less influential than other factors. The location of the pharmacy is still important but has a slightly lower influence.

**In the context of independent pharmacies**, customer satisfaction is the variable with the greatest influence on the pharmacy performance followed by price fairness, location, medication supply and Pharmacist attitude. High customer satisfaction contributes significantly to pharmacy performance through consumer loyalty and repeated purchases. Price fairness also has significant influence, as fair pricing increases customer satisfaction and loyalty. Pharmacy location and medication supply have important but slightly lower influence than those factors. Pharmacist attitude, although important for customer experience, has the lowest influence in the context of pharmacy performance. The primary focus of independent pharmacies on improving performance should be on increasing consumer satisfaction and fair pricing offers, while maintaining quality of service, location and availability of medicines. By understanding the order in which these variables influence, independent pharmacies can focus on the areas most critical to increasing customer satisfaction and, ultimately, the performance of their pharmacies.

## 5. CONCLUSION AND SUGGESTION

### Conclusion

Based on the results of the research and discussion that have been described in the previous chapter, it can be concluded that the number of respondents is 345. Customer satisfaction is the variable with the greatest influence on pharmacy performance, followed by price fairness, location, medication supply and pharmacist attitude. Furthermore, Pharmacy Attitude, Medication Supply, Pharmacy Location and Price Fairness had significant direct influence on Customer Satisfaction. Customer Satisfaction had a significant direct influence on Pharmacy Performance. Customer Satisfaction also mediates the influence of Pharmacy Attitude, Medication Supply, Pharmacy Location and Price Fairness on Pharmacy Performance.

### Suggestion

Based on this study's conclusions, the following recommendations can be proposed:

1. **Theoretical advice for the next researcher:** It is recommended to add a question indicating that the client has purchased medicines at the corresponding pharmacy at least three times. It aims to be more accurate in describing pharmacy performance.
2. **Practical advice for independent pharmacies:** Independent pharmacies should be aware that patient satisfaction can encourage supportive behavior, such as providing positive feedback and increasing volume and frequency of purchase. This was critical to

the long-term success of the pharmacy business. Consumers tend to be loyal to certain pharmacies because they feel that the price of the drug being offered is reasonable and reasonable, and do not feel disadvantaged by the unfair price.

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