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FACTORS AFFECTING THE ELECTRONIC CONSUMER'S BUYING BEHAVIOR ON SELECTING THE PHARMACY: AN EMPIRICAL STUDY ON THE CONSUMERS OF PRIVATE PHARMACIES IN AMMAN CITY-JORDAN

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Abstract

The main objective of this study is to know the factors affecting the electronic behavior of consumers when they choose the pharmacy that they will deal with in the city of Amman. One of the dimensions to which the initial study was exposed is alternative medicines, the reference groups, and the extent of trust in the pharmacist, and it represents part of the independent study variables. As for the dependent variable, it is electronic consumer buying behavior. A questionnaire designed by researchers was used and distributed to a random sample of consumers in the city of Amman. The questionnaire consisted of two parts, the first part being personal information about the sample members, while the second part was paragraphs specifying the factors of choosing the pharmacy by consumers. The sample size was 427 people. The results of the study showed that there are statistically significant differences at the level ($\alpha \leq 0.05$) between the availability of medicines, reference groups and pharmacy arrangement on consumer behavior in choosing a pharmacy. One of the recommendations that came out of this study is that the responsible pharmacist should be given attention to his ability to attract customers and raise their level of satisfaction.

Keywords: Electronic Consumer's Buying Behavior, Pharmacies and Jordan.

1. INTRODUCTION

Electronic Consumer behavior towards medicines has become one of the basics on which pharmaceutical companies and pharmacists depend, as it is important in the elements of the marketing mix, especially the price. The e- purchasing decision by consumers plays a large and effective role in determining the priorities of purchasing in Jordan. Due to the limited financial resources and lack of awareness among consumers, this led to the search for alternatives at low prices. In the field of medicines, the consumer resorts to buying alternative medicines at low prices, although the government plays a major role in providing insurance to citizens to overcome the scarcity of financial resources and this leads to It makes consumer behavior a bit more cautious [9] [10].

The Seybold Report
ISSN 1533-9211
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2. STUDY PROBLEM & QUESTIONS

If all pharmacies have the same drug with the same price why i have to select a particular one instead of another.

In this sense, the problem of the study can be summaries by answering the main question of the study: what is the effect of selecting factor of the pharmacy on e-customer buying behavior in selecting the pharmacy in Amman City? **From this main question the following sub-questions are supposed:**

1. What is the effect of alternatives drugs factor of the pharmacy on e-consumer buying behavior in selecting the pharmacy in Amman City?
2. What is the effect of reference group's factor on e-consumer buying behavior in selecting the pharmacy in Amman City?
3. What is the effect of internal organization of the pharmacy factor on e-consumer buying behavior in selecting the pharmacy in Amman City?
4. What is the effect of confidence in pharmacist factor on e-consumer buying behavior in selecting the pharmacy in Amman City?
5. What is the effect of availability of drugs factor on e-consumer buying behavior in selecting the pharmacy in Amman City?

3. IMPORTANT OF THE STUDY

The importance of the study relates to the difference in e-consumer behavior towards the decision to choose a pharmacist. Moreover, the study is to discover the means that guarantee good treatment, providing drug with the least time, effort and cost, especially when obtaining the best.

4. OBJECTIVES OF THE STUDY

The objectives of the study is to determine the reasons behind customers' interactions with specific pharmacies, as well as to obtain accurate data about electronic customers' buying behavior.

5. LITERATURE REVIEW

Technology advancement has influenced people's lifestyles in different ways. There have been many technological developments and inventions centered on living a convenient life. Technology is a fundamental tool for communication and it is constantly evolving [12]. Nowadays Online purchase of medicines through online portals of pharmacies become extra accepted into people's daily life lot of citizens prefers online shopping to usual shopping of medicines[13]. The outcomes in the study for [6] shows that the trust is more important parameter and influenced by the social media in the UK context, but it is not playing a significant role in USA and India context through social media. Perceived usefulness,

ISSN 1533-9211

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perceived intention and demographics are influenced by the social media feedback posted across different cultures which impact online buying behavior of medicine (e-pharmacy). [7] focuses three major elements impulsive e-consumers buying behavior in emergency situations, such as COVID-19, marketing stimuli, and product characteristics The internet and mobile phones are essential to most people's lifestyles, including for communication and buying and selling products via online and offline channels. The study found the factors that affect the customers' purchase decision from pharmacies, and these factors help gain customer loyalty and help pharmacies face potential competitors [5].The study touched on the impact of a number of laws in the field of medicine on how customers buy in America. The results of the analysis showed that there are many laws that affect the purchase decision [4].The study aimed to provide a contribution to the studies on the services marketing for the company Parasuraman and to know the services assigned to pharmaceutical companies. A questionnaire was designed for the purpose of examining the quality of services. The questionnaire was distributed to specific distributors in three Indian cities. The findings of the study shows that there is satisfaction among the distributors as a result of the quality of the services provided. The study showed the contributions and studies of Parasuraman company, where a questionnaire was designed for this purpose and the quality of the services provided was examined, as it was found that there is satisfaction with these services[14].The study shows the patient loyalty in pharmaceutical services in Australia, and questionnaires were distributed to the members of the sample, it was found from the analysis that there is an effect on the performance of employees in pharmacies on pharmacy customers [1][8].

Moreover, one of the study showed the effect of pharmaceutical services in Hamad Hospital in Qatar, and the results of the analysis showed customer satisfaction is affected by the speed of services provided to him by the pharmacy and the waiting period to receive the service and good drug advice [2].Other study which was conducted in western Canada, examined patients' opinions about the pharmacy brand. The results showed that there is a difference between pharmacies in the brand, especially international pharmacies [3]

6. STUDY MODEL

The model of the study figure (1) based on the studies variables and after returning to the study of [3] [5].

ISSN 1533-9211

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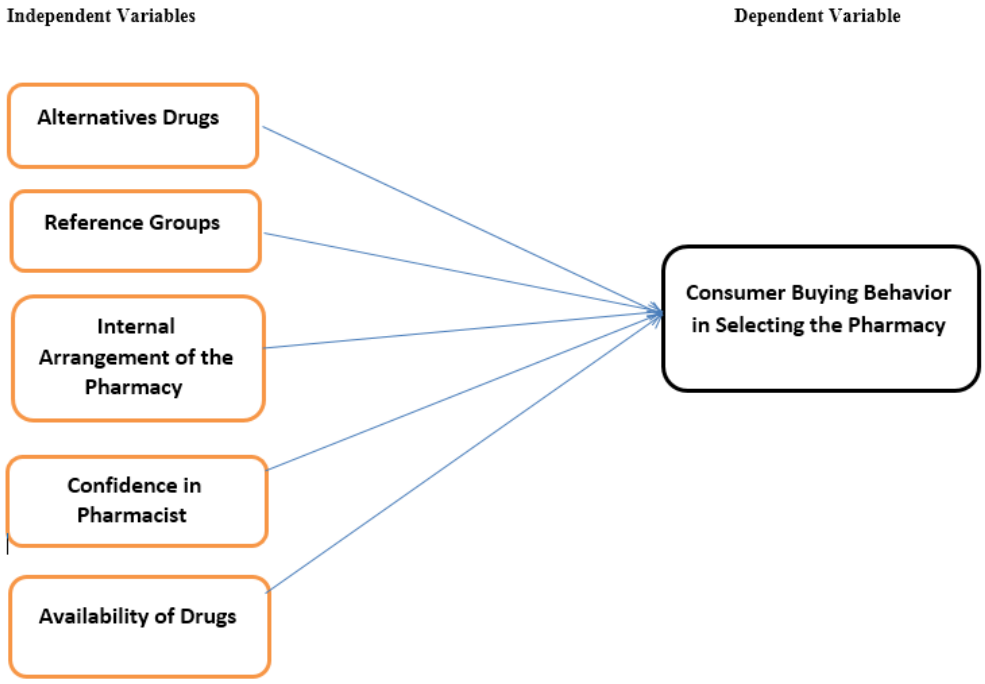
Figure (1) the Study Model



7. METHODOLOGY

The statistical program SPSS was used, and the study relied on two types of data: The secondary data which collected from a number of previous studies of the subject of research, and the primary data collected from the field study were used using a questionnaire.

The questionnaire consisted of two parts, the first is personal information about customers, and the second part consists of 44 paragraphs related to the factors that affect the choice of pharmacy, and these paragraphs are divided according to the five- Likert scale.

The questionnaire was presented to a number of specialized persons in Jordanian universities, and the observations they made on the questionnaire were taken, and the reliability coefficient of Cronbach's alpha was calculated, and its value was (0.7).

7.1 Statistical Methods

The statistical program SPSS was used to analyze the results, and one-way analysis of variance was used to show the differences between the sample members.

7.2 Hypotheses

H0: There is no statistically significant effect at ($\alpha \leq 0.05$) of selecting factor of the pharmacy on e-consumer buying behavior on selecting the pharmacy in Amman City.

The Seybold Report
ISSN 1533-9211
DOI 10.17605/OSF.IO/DA84N

From this main hypothesis, the following sub-hypotheses are derived:

H01: There is no statistically significant effect at ($\alpha \leq 0.05$) of alternative drugs on e-consumer buying behavior on selecting the pharmacy in Amman City.

H02: There is no statistically significant effect at ($\alpha \leq 0.05$) of reference groups on e-consumer buying behavior on selecting the pharmacy in Amman City.

H03: There is no statistically significant effect at ($\alpha \leq 0.05$) of internal arrangement of the pharmacy on e-consumer buying behavior on selecting the pharmacy in Amman City.

H04: There is no statistically significant effect a t ($\alpha \leq 0.05$) of confidence in pharmacist on e-consumer buying behavior on selecting the pharmacy in Amman City.

H05: There is no statistically significant effect at ($\alpha \leq 0.05$) of availability of drugs on e-consumer buying behavior on selecting pharmacy in Amman City.

7.3 Sample Size

The study population consisted of all pharmacies operating in the private sector in the city of Amman. As for the study sample, it should not be less than 381 according to [11], and thus the sample was 427 customers after excluding the unusable questionnaires

7.4 Sample Characteristics

By analyzing the data on the sample members, it was found that 55% are females and that the percentage of married members of the sample was (69.3%), and it was found that (45.7%) of the bachelor's degree holders and (32.1%) of the sample members whose age is less than 20 year, and it was also found that (55.5%) his income ranged from 500 dinars to less than 1000 dinars.

8. LIMITATIONS

The limitations faced by the study were limited to the following:

- Human determinants, where the behavior of customers in private pharmacies was studied.
- Location determinants, approved in the city of Amman only and did not extend to the rest of the Jordanian cities.
- Determinants of the topic, where the factors that affect the behavior of customers when choosing pharmacies were discussed.

9. RESULTS

To answer the research question which is what is the effect of choosing a pharmacy factor on the purchasing behavior of customers? The following discussion and tables shows the "Mean" and "Standard Deviation" for all variables.

ISSN 1533-9211

DOI 10.17605/OSF.IO/DA84N

Table (1) Means and Standard Deviation for Alternative Drugs Variable

NO	Item	Means	Standard Deviation
1	The pharmacist was careful to give me an alternative medication if the original medication was unavailable	4.7892	.61099
2	The pharmacist proposes a drugs with low prices alternative to high-priced medicine	4.8876	.49553
3	The alternative medication that the pharmacist is proposing meets the purpose.	4.9087	.39193
4	Pharmacy provides pharmaceutical substitutes for the same drugs structure	4.8946	.47535
5	Multiple pharmaceutical alternatives give me the choice of the drugs that suits my potential.	4.8618	.50082
6	The pharmacist provides alternative drugs in the absence of medication prescribed by the physician in all pharmacies	4.8782	.45364
	Average	4.870	0.4880

Regarding the alternative drugs variable, it is clear from Table No. 1 that the customers' point of view is that the alternative drugs provided by the pharmacist meets his needs, as the mean for this paragraph was the highest which (4.9087) is. As for the paragraph related to the pharmacist's keenness to provide the customer with the alternative drugs in the absence of the original drugs it was found that this paragraph has the lowest mean. And we find that the alternative drugs are located at a high level, where the mean was (4.870).

Table (2) Means and Standard Deviation for Reference Groups Variable

NO	Item	Means	Standard Deviation	Importance	Level
7	The family advises me to buy drugs from a certain pharmacy.	4.8501	.49030	2	High
8	My coworkers advise me to deal with a particular pharmacy	4.8337	.50163	5	High
9	I deal with the pharmacy my friends go to	4.8454	.46421	4	High
10	I'm dealing with the pharmacy that one of my family members is working in	4.8501	.48063	3	High
11	I'm dealing with the pharmacy I have previous experience with	4.8759	.43986	1	High
	Average	4.851	0.475		High

Regarding the reference groups variable, it is clear from Table No. 2 that customers prefer to deal with a pharmacy they have experience in dealing with, where the mean of this paragraph is (4.8759), which is the highest mean.

As for the lowest mean, it was for the paragraph related to the fact that the customer's friends advised him to deal with a pharmacy they have experience in.

The Seybold Report
ISSN 1533-9211
DOI 10.17605/OSF.IO/DA84N

Table (3) Means and Standard Deviation for Internal Arrangement of the Pharmacy Variable

NO	Item	Means	Standard Deviation	Importance	Level
12	The drugs arrangement works for the convenience of the customer	4.8970	.42089	1	High
13	Arranging drugs in the department contributes to the fast completion of the pharmacist's mission in providing the service	4.8782	.44844	3	High
14	The consumer can easily observe the drugs and their requirements	4.8220	.54487	5	High
15	The coordination and sequencing of drugs give a suitable environment for obtaining them	4.8618	.44629	4	High
16	Pharmacy classifies drugs according to their degree of importance on shelves	4.7752	.70614	6	High
17	The pharmacy staffs are obligated to keep them permanently clean.	4.8806	.44645	2	High
	Average	4.852	0.3522		High

Regarding the internal arrangement of the pharmacy. Variable, it is clear from table No. 3 that the customers feel strongly in the paragraph stated that the drug was placed in an orderly manner to comfort customers. The mean for this paragraph reached (4.8970), which is the highest mean, and for the lowest mean, it was for the paragraph related to the fact that the pharmacy arrange the drugs on the tablets according to their importance.For the consumer, internal organization of the pharmacy, within high level with a mean of (4.852), that explains that the pharmacy tries to comfort the consumer by placing the drugs conveniently on the shelves.

Table (4) Means and Standard Deviation for Confidence in Pharmacist Variable

NO	Item	Means	Standard Deviation	Importance	Level
18	I increased my confidence in the pharmacist based on my personal relationship with him.	4.8478	.51070	6	High
19	The pharmacist is keen to advice on how to take medication.	4.9368	.33319	1	High
20	The pharmacist explains the side effects and contraindications of the use of treatment well	4.8033	.60023	8	High
21	The pharmacist gives me precautions when taking drugs with other medications	4.8361	.45068	7	High
22	The pharmacist asks about the results if he is cashing certain drugs for the patient	4.8970	.43190	4	High
23	The pharmacist I am dealing with is making regular health awareness campaigns	4.9063	.39436	2	High
24	The pharmacist wears the medical coat of the pharmacists as he adheres to the proper appearance	4.8689	.48123	5	High
25	The pharmacist inquires about the condition of the patient when giving the drugs prescribed by the Doctor	4.8993	.39560	3	
	Average	4.874	0.449		High

The Seybold Report
ISSN 1533-9211
DOI 10.17605/OSF.IO/DA84N

Regarding the confidence in the pharmacist variable, it is clear from Table No. 4 that the customers feel strongly in the paragraph stated that the pharmacist advises customers how to take the drug in the correct way, and the mean value has reached (4.9368).

As for the lowest mean value, we find it in the paragraph that relates to the pharmacist explaining well what the side effects of the drug are

Table (5) Means and Standard Deviation for the Availability of Drugs Variable

NO	Item	Means	Standard Deviation	Importance	Level
26	The pharmacy is keen to provide drugs on a permanent basis to consumers.	4.7471	.78526	2	High
27	The pharmacy is keen to provide global brand	4.7471	.72624	3	High
28	The pharmacy offers medicines as prescribed by the Doctor	4.7564	.81746	1	High
29	The pharmacy I'm dealing with provides a well-known brand of cosmetics	4.3255	1.35639	6	High
30	The pharmacist communicates with the consumer in the event of available drugs that were not available beforehand.	4.4778	1.21661	5	High
31	The pharmacy I'm dealing with provides the most distinctive drugs and cosmetics.	4.1311	1.46849	7	High
32	I'd rather deal with the pharmacy that's in the hospital to ensure that the drugs are available.	4.4895	1.19536	4	High
	Average	4.524	1.079		High

Regarding the availability of drugs variable, it is clear from Table No. 5 that the customers feel strongly in the paragraph stated that the pharmacist gives the medicine to the customer according to the doctor's prescription, and thus increases the customer's confidence in the pharmacist. The mean for this paragraph has reached (4.7564), which is the highest mean, but the lowest mean has reached (4.1311), which is for the paragraph related to the fact that the pharmacy provides most of the distinguished medicines and cosmetics.

10. MULTICOLLINEARITY TESY

To find out if there is a relationship between the independent variables and the effect of each independent variable on the rest of the variables, we conduct a multicollinearity test Table (6). Also, to determine the multiple linear relationship we use the correlation indicator, the correlation between the variables should be (0.9) or less [7].

The Seybold Report
ISSN 1533-9211
DOI 10.17605/OSF.IO/DA84N

Table (6) Correlations of Independent Variables

Independent Variables	Alternatives Drugs	Reference Groups	Internal Arrangement of the pharmacy	Confidence in pharmacist	Availability of Drugs
Alternatives Drugs	1	.321**	.433**	.058	.248**
Reference Groups		1	.262**	.223**	.338**
Internal Arrangement of the pharmacy			1	.129**	.432**
Confidence in pharmacist				1	.082
Availability of Drugs					1

**. Correlation is significant at the 0.01 level (2-tailed).

11. HYPOTHESES TESTING

Main Hypothesis

Table (7) shows the Result of Multiple Regression for the Main Hypothesis.

Table (7) Results of Multiple Regressions for the Main Hypothesis

Dependent Variable	R	R	F	DF	SIG	Independent Variable	B	T	Beta	Sig
Consumer buying behavior on selecting the pharmacy	.643a	.414	59.380	5	0.000	Alternative Drugs	-.067	-1.016	-.043	.310
				421		Reference Groups	.188	2.769	.116	.006
				426		Internal Arrangement of the Pharmacy	-.161	-2.333	-.105	.020
						Confidence in Pharmacist	-.238	-2.280	-.088	.023
						Availability of Drugs	.682	1.5082	.646	.000

It is clear from Table No. 7 that the dependent variable and the independent variables are statistically significant, with a value of F (59.380), and therefore we reject the hypothesis and that the relationship between the independent variables and the dependent variable is more than (0.5).

First sub hypothesis

Table (8) shows the Result of Simple Regression for the First sub Hypothesis.

Table (8) Results of Simple Regression for the First Sub- Hypothesis

Dependent Variable	R	R^2	Independent Variable	F	SIG
Consumer 's Buying Behavior	.104	.011	Alternative Drugs	4.609	.032

It is clear from the table that the value of F was (4.609) and therefore we reject the hypothesis

Second sub hypothesis

Table (9) Results of Simple Regression for the Second Sub- Hypothesis

Dependent Variable	R	R^2	Independent Variable	F	SIG
Consumer's Buying Behavior	274a	.075	Reference Groups	34.461	.000

The Seybold Report
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It is clear from the table that the value of F was (34.461), and therefore we reject the hypothesis.

Third sub hypothesis

H03: There is no statistically significant effect at ($\alpha \leq 0.05$) of internal arrangement of the pharmacy on consumer is buying behavior on selecting the pharmacy in Amman City. Table (10) shows the Result of Simple Regression for the third sub Hypothesis.

Table (10) Results of Simple Regression for the third Sub- Hypothesis

Dependent Variable	R	R^2	Independent Variable	F	SIG
Consumer's Buying Behavior	.175	.031	Internal Arrangement of the Pharmacy	13.457	.000

It is clear from the table that the value of F was (13.457), and therefore we reject the hypothesis.

Fourth sub hypothesis

Table (11) Results of Simple Regression for the fourth Sub- Hypothesis

Dependent Variable	R	R^2	Independent Variable	F	SIG
Consumer's Buying Behavior	.025a	.001	Confidence in Pharmacist	.261	.609a

It is clear from the table that the value of F was (.261), and therefore we accepts the hypothesis.

Fifth sub hypothesis

Table (12) Results of Simple Regression for the fifth Sub- Hypothesis

Dependent Variable	R	R^2	Independent Variable	F	SIG
Consumer's Buying Behavior	.388	.623a	Availability of Drugs	268.940	.000a

It is clear from the table that the value of F was (268.940), and therefore we reject the hypothesis

12. STEPWISE REGRESSION

Table (13) Results of Stepwise Regression

No.	Variables	F	R	R2	Sig
1	Availability of Drugs	268.940	.623a	.388	0.000
2	Availability of Drugs Internal Arrangement of the pharmacy	140.384	.631b	.398	0.000
3	Availability of Drugs Internal Arrangement of the pharmacy Reference Groups	96.042	.637c	.405	0.000
4	Availability of Drugs Internal Arrangement of the pharmacy Reference Groups Confidence in pharmacist	73.962	.642d	.412	0.000

The Stepwise Regression determines which independent variable has the greatest contribution to the dependent variable, and variables that do not have a high contribution are excluded. And the Stepwise Regression divided all the independent variables into four groups, which had the

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largest contribution to the dependent variable with a percentage of (38.8%), which is the alternative drug variable.

The second highest contribution (39.8) to the dependent variable is the availability of drug and the internal arrangement of the pharmacy.

Followed by the third level (40.5%) which is reference groups, then comes the availability of drugs and their internal arrangement in the pharmacy (41.2%).

12. CONCLUSION

The study showed that there is no statistically significant effect on the pharmacy selection factors on the purchasing behavior of customers in the city of Amman. There are a number of variables included in the study. The contributing variables to the factors affecting consumer behavior amounted to about (64.6%).And the research showed that there is statistical significance of alternative medicines on the customer's purchasing behavior in choosing a pharmacy in the city of Amman. There is also a statistically significant effect at ($\alpha \leq 0.05$) for the internal arrangement of the pharmacy and for the reference groups on the purchasing behavior of the consumer in choosing the pharmacy. And there is no statistically significant effect at the ($\alpha \leq 0.05$) level of pharmacist confidence

13. RECOMMENDATIONS

- Persons in charge of pharmacies, such as the Pharmacists Syndicate, must know and define the needs of consumers
- Develop a mechanism for hiring pharmacists
- Providing a suitable atmosphere for work in pharmacies and working to find effective channels of communication between pharmacists and consumers
- Training pharmacists to work on providing a suitable environment and to adopt the human aspect in dealing with consumers
- Training of pharmacists on the mechanism of drug classification
- Developing the job description for pharmacists

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