https://doi.org/10.26682/hjuod.2022.25.2.31
Journal of University of Duhok.,Vol. 25, No.2 (Humanities and Social Sciences), P 573-586, 2022

THE IMPACT OF COVID-19 ON CONSUMERS' ONLINE SHOPPING BEHAVIOR

AN EXPLORATORY STUDY OF THE OPINIONS OF A SAMPLE OF CONSUMERS IN KURDISTAN REGION–IRAQ

AYA **S**AADOON **A**RABI
Dept. of, Financial and Banking Sciences, College of Administration and Economics,
University of Duhok, Kurdistan Region-Iraq

(Received: September 3, 2022; Accepted for Publication: December 1, 2022)

ABSTRACT

Due to the increase in using the internet, online shopping has become very suitable for many consumers. Moreover, owing to COVID-19, online shopping became more appealing, considering the lockdown and health restrictions. This research's purpose is to identify the effect of COVID-19 on consumers' online shopping behavior, the research has two main hypotheses which are, there is a significant and positive statical correlation between COVID-19 and consumers' online shopping behavior, and COVID-19 has a significant effect on consumers' online shopping behavior. In this research the independent variable is COVID-19 and the dependent variable is online shopping which has four factors (convenience, time-saving, web design & literacy, and security). The research studied a random sample of consumers in Kurdistan region – Iraq, (120) electronic forms of the research questionnaire were distributed to the respondents, and (108) forms were returned and valid which represent a percentage of (90 %) of the distributed questionnaire. The research revealed that there is a significant and positive correlation between three of the online factors which are (time-saving, web design & literacy, and security) and COVID-19, while the correlation between the first online shopping factor (convenience) and COVID-19 was insignificant, also there is a significant effect of COVID-19 on online shopping. The research suggests since consumers increased their dependence on online shopping during the pandemic in the percentage of (22.5 %), the markets and businesses in Kurdistan region – Iraq should consider enhancement in their online services and delivery timing and packaging in order to offer and present the best service to their customers and keep in competition in the markets.

KEY WORDS: COVID–19, Lockdown, Pandemic, Shopping Behavior, E-commerce, Online shopping, physical shopping.

1. INTRODUCTION

History shows that the world has been repeatedly affected by pandemics over the past decades, these pandemics have included the Spanish Flu of 1918–1919, the Asian Flu of 1957–1958, the Hong Kong Flu of 1968, the SARS-CoV-1 of 2002–2003, and the Swine Flu of 2009–2010 (Cherry, 2004: 5). As a result of Covid-19, in the year 2020 many retails have been forced to close for months, except for fundamental necessities such as daily needs markets, pharmacies, and gas stations. Stores that have remained open suffered from health instructions, obligations and social distancing requirements. These actions have changed consumers' shopping behaviors, which in many cases has resulted in more transactions becoming online. They started to prefer online shopping and prepare themselves to face a long period of lockdown, Online shopping has reformed the marketing strategies of many businesses in recent decades as consumers have grown adaptation to online shopping and the door-step-delivery of products from anywhere in the world (Bucko et al, 2018: 1; Rahman et al, 2018: 1).

To slow the rapid spread of the virus, most countries dramatically restricted social life. These restrictions ranged from bans on large events and the closure of schools and universities to a temporary shutdown of the economy (European Union, 2020a: 6). In countries that imposed a shutdown, most retail stores and services had to close. Simultaneously, consumers faced growing levels of economic uncertainty because of rising unemployment and short-term work (European Union, 2020b: 8). Due to the closure of stationary retail stores,

online shopping has become the only means for consumers to satisfy their consumption needs.

Particularly, in Kurdistan region-Iraq, E-commerce has developed since the number of consumers that are anxious to learn about Online shopping has increased. Accordingly, this research discusses costumers' behavior concerning Online shopping, and how COVID-19 has impacted it.

2. LITERATURE REVIEW

As a result of the pandemic, it was advised to the whole world by all the medical agencies, especially WHO to keep a safe distance and wear masks in order to avoid the infection. To stop the pandemic, governments of nearly all countries effectively achieved lockdown in their countries. All the people around the world were restrained in their houses and their work places were shut down. Moreover, all the business places were asked to close and were suggested not to do business until the next announcement. This was the first time that all the types of businesses were globally asked to shut down for undefined period of time. It caused confusion in the business market and made the whole business community unstable (Queiroz et al., 2020: 7).

Even after the lockdown, when the businesses were permitted to re-open, they were only allowed to use their partial force to operate. Governments at the beginning has allowed the E-commerce business sector to establish its activities because they had the minimum person to person contact and easier to avoid any kind of gathering. This helped to reduce the spreading chances of the pandemic (Tyagi & Pabalkar, 2021: 2).

Normally, because of the lockdown more customers turned to online shopping to buy the goods they needed and wanted, as many stores closed their doors at that time and shoppers had a tendency to lower danger by staying in their homes. A lot of businesses shifted from physical markets to E-commerce when the physical movement became restricted but, even after the pandemic huge effects and the ending of the lockdown the growth of online shopping and E-commerce remained constant. It turned out to be very important for the businesses to develop new capabilities and features for the online market for ensuring a positive experience for the consumers and to achieve the digital corner and stay in competition (Tyagi & Pabalkar, 2021: 5).

Consequently, the use of credit cards in Iraq overall not only in Kurdistan region is minimal, with consumers essentially relying on cash for their daily transactions. According to Ahmed (2020: 53) banks and other financial institutions have not been able to arrange the services needed for issuing credit cards; the institutions lack the proper base. Regardless, consumers in Iraq's Kurdistan region have shown favorable inclinations toward the use of credit cards. However, their behavior toward online payments system has not grown enough to meet the requirements of online shopping.

According to Sullivan and Kim (2018: 199) product evaluation is an important factor in online shopping intentions and the value perceived by consumers is affected by perceived quality, perceived competitive price, and website reputation. This, in turn, affected overall online trust. Soopramanien (2011:338) studied the development of consumer behavior toward online shopping and examined the concept of online-shopping skepticism, which reflects people's fear of online-shopping risks, even when they comprehend the benefits. Moran (2020: 3) argued that consumers appeal to shopping for products and services changed when they used online shopping, as online firms and businesses have more control over the consumer shopping experience, including unprecedented access to buyer data and demographics. The author showed that consumer perceptions of risk decreased as they gained more experience and literacy. After intensive examination, their study concluded that, compared with offline spending, consumers did not consider that online businesses would use manipulative tactics and deceptive practices to increase online shopping.

2.1. Online Shopping Factors

2.1.1. Convenience

The concept of convenience has reference way back in (1923) in the literature by (Copeland, 1923: 282), who used it in the context of the allocation of goods. He related convenience goods with ease of accessibility and constant purchase. while, (Brown, 1989: 13) related convenience goods with consumer's low involvement during the purchasing process. The author indicates convenience in online shopping happens when the businesses provide sufficient information about the products and services on their websites which helps the buyer complete the purchasing process easily with high trust in the purchased goods and services. Also

providing many payment methods for the consumer and declare returning policy. However, most authors agreed to put the convenience of shopping under the term minimizing efforts.

2.1.2. Time-saving

Showing online shopping as a time-saver is likely to be effective for those experiencing time pressure. As they would certainly welcome anything that would reduce their activity level and the need for their time (Alreck, 1988: 19). This is not to say that those who seek high levels of activity, will not find online shopping and buying appealing. It is just that it is not the time-saving aspect they value. It is important to recall that people of this type are prone to engage in the polychronic activity (Lindquist & Kaufman-Scarborough, 2004: 332). The fact that they can shop online any time and from any place they have internet access might be very appealing because it allows them to shop while at the same time they are engaged in other activities (Richbell & Kite, 2007: 54).

2.1.3. Website design and literacy

There are many features of website design that contribute to online trust. These features can be categorized into three dimensions to propose a framework of trust-inducing website features. (Karimov et al., 2011: 16) classified these dimensions as visual design, social-cue design, and content design. Every E-commerce business should consider these features in designing their website in order to gain the costumers' trust. In addition, customers would like also to minimize the mental effort they expend on online shopping (Jarvenpaa & Todd, 1997: 59). The beliefs regarding resource facilitation accommodate this aspect of E-commerce. Resource facilitation refers to the availability of resources needed to perform the intended behavior (Taylor & Todd, 1995: 144; Triandis, 1977: 11). The author indicates to web design elements that provide facilitating resources, such as product customization or facilities for payment, may reduce the mental efforts and increase the customers sense of control and power regarding the availability of resources, thus reinforcing the behavior intention.

2.1.4. Security

Unlike in a physical shop, customers can't see, touch or try on things they want to purchase. For that reason, the customer has the right to return the purchased goods within a specified period of time (Ingaldi & Ulewicz, 2019: 13). However, online shopping is not dangerous free. Many online shopping businesses place only chosen information or do not place at all information about themselves, details about their products. Often, it is not possible to choose the way of payment or delivery. It also happens that the delivered goods do not correspond to what the customer saw on the website and ordered, it has very low quality, and what is worse, sometimes if the payment is in advance using credit cards, the package, despite being paid, never reaches the customer. Customers also don't feel safe of the personal data they provide or the credit cards used during the financial transaction (Gupta & Dubey, 2016: 22; Biener et al., 2015: 13). The author concludes that consumer's lack of trust in online shopping is considered as one of the main barriers to the E-commerce growth.

3. METHODOLOGY

3.1. Research Problem

As the internet had become an essential necessity of each of us life, the use of the internet in financial and commerce transactions had expanded and due to this shopping by the internet became somehow suitable and convenient for some consumer, after the spread of COVID-19 people were guided by health restrictions this led to persuade them to use more online shopping. From this the research problem can be framed in: What is The Impact of COVID-19 on Consumers' Online Shopping Behavior?

3.2. Research Importance

This study is important in that it contributes to enriching the literature by addressing an important topic, namely online shopping. In addition, this research is considered one of the very few researches that examined the impact of Covid-19 on online shopping behavior in Kurdistan region – Iraq.

3.3. Research aims

The main aim of this research is to shed light on online shopping behavior after the spread of COVID-19. And other aims, which are as follows:

- Diagnosing the impact of COVID -19 on online shopping behavior in the region.
- Determining the most common factor of online shopping affecting the growth of E-commerce.
- Reaching a number of conclusions and suggestions related to the impact of COVID -19 and lockdown on the online shopping behavior of consumers.

3.4. Research Hypothesis

3.4.1. Correlation hypothesis: the first main hypothesis is **there is a significant and positive statical correlation between COVID-19 and consumers' online shopping behavior**, from this hypothesis there are four emerged sub-hypotheses as following:

- There is a significant and positive correlation between COVID-19 and convenience.
- There is a significant and positive correlation between COVID-19 and time-saving.
- There is a significant and positive correlation between COVID-19 and web design and literacy.
- There is a significant and positive correlation between COVID-19 and security.

3.4.2. Effect hypothesis: the second main hypothesis is **COVID-19 has significant effect on consumers' online shopping behavior**, from this hypothesis there are four emerged sub-hypotheses as following:

- COVID-19 has a significant effect on convenience.
- COVID-19 has a significant effect on time-saving.
- COVID-19 has a significant effect on web design and literacy.
- COVID-19 has a significant effect on security.

3.5. Data Collection Instrument

The primary data for this study were collected by respondents using an electronic questionnaire designed by the author that consisting of three basic parts, consisted of the demographic information, questions considering COVID-19, and online shopping part divided into four sections. All phrases were measured according to a 5-point Likert scale ranging from strongly agree weighted with five points to strongly disagree weighted with one point.

3.6. Reliability

In order to ascertain the ability of the questionnaire to measure the variables of the research, the reliability of the questionnaire was measured using Cronbach's alpha coefficient, the values of Cronbach's alpha as shown in table (1) were (0.72) for COVID-19, (0.76) for online shopping, (0.77) for total questionnaire items, thus, it can be concluded that the measures have an acceptable level of reliability.

Table (1): Results of Reliability

Factors	Cronbach's Alpha
COVID-19	0.72
Online shopping	0.76
Total Questionnaire Items	0.77

Resource: by author, depending on SPSS results.

3.7. Skewness & Kurtosis

Skewness & Kurtosis tests are applied to measure the shape of data distribution, the normative values of Skewness' test must be between (3) and (-3), and the normative values of Kurtosis' test are between (7) and (-7), (Cao & Dowlatshahi, 2005: 542). As shown in table (2) the Skewness values of the current research and its variables are between (0.085) and (-1.040), and they are in the normative values range. Furthermore, the Kurtosis values of the research and its variables are in the normative values range and they are between (3.11) and (-0.236). This concludes that the research data were normally distributed.

Table (2): Results of Skewness & Kurtosis

Variables	Skewness	Kurtosis
COVID-19	-1.04	3.11
Convenience	-0.075	-0.236
Time – saving	-0.107	0.795
Web design & literacy	0.085	-0.029
Security	-0.364	1.013

Resource: by author, depending on SPSS results.

3.8. Levene's test

To measure the homogeneity of the variables, levene's test is adapted. And it can be accrued when the significant level is more than (0.05). Based on the results in table (3) the significancy level of the research and its variables are all more than (0.05). This assures the homogeneity of the research variables.

Table (3): Results of Levene's test

Variables	Levene	Sig.
COVID-19	1.534	0.218
Convenience	0.091	0.764
Time – saving	0.287	0.2
Web design & literacy	0.844	0.07
Security	0.904	0.344

Resource: by author, depending on SPSS results.

3.9. Sampling

Random sampling was used to select the participants for this research, A purposive sampling technique was deployed. The research sample includes consumers above (18) years old. About (120) electronic forms of the research questionnaire were distributed to the respondents, and about (108) forms were valid which represent a percentage of (90%) of the distributed questionnaire. The sample was distributed according to a number of demographic characteristics, as the male gender was the majority of the sample at a percentage of (50.9%) the age class of (26 - 35 years) constituted the majority of the participants in the sample at a percentage of (47.2%), while the percentage of (54.6%) of the participants are government employees. As shown in table (4)

Table (4): Demographic Characteristics for the Sample

Characteristic	Class	Frequency	Percentage
Gender	Male	55	50.9
	Female	53	49.1
Age	18 – 25	9	8.3
	26 – 35	51	47.2
	36 – 45	28	25.9
	45 and more	20	18.5
Employment Status	Government employee	59	54.6
	Private employee	19	17.6
	Business owner	6	5.6
	Unemployed	21	19.4
	Student	3	2.8
Total		**108**	**100%**

Resource: by author, depending on questionnaire data.

Figure (1) shows that (64.8%) of the respondents have tried online shopping before the pandemic, and (87.3%) of them used online shopping during the pandemic, which reveals that the usage of online shopping was increased by (22.5%).

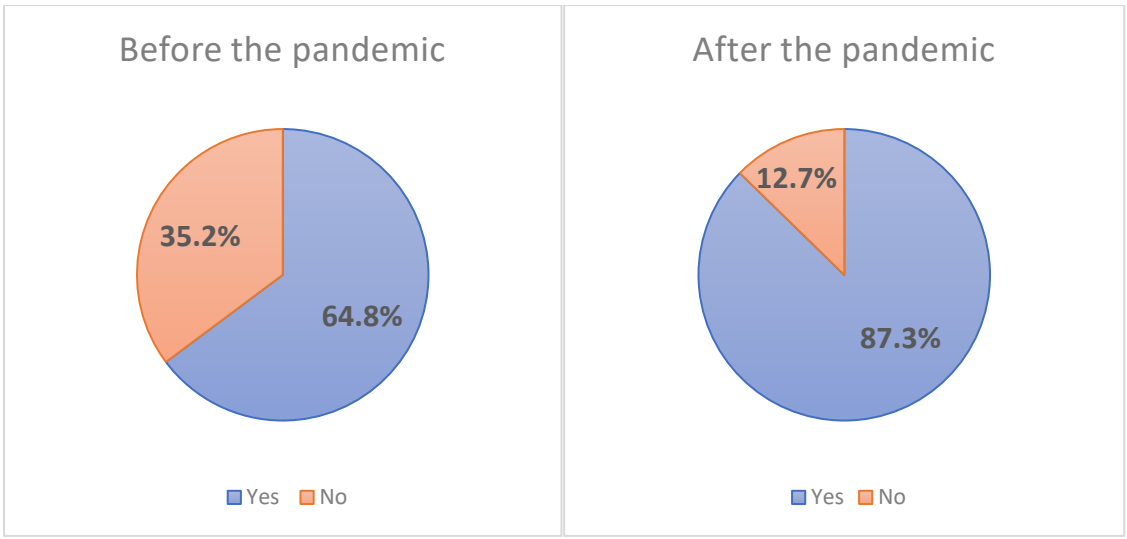

Fig. (1): the usage of online shopping before and after the pandemic
Resource: by author, depending on questionnaire data.

(80.6%) of online shopping is processed by using social media, and (42.6%) by local websites, while worldwide websites are used by (31.4%), and applications were a way to online shop by percentage of (12%), and other ways of online shopping like ordering by a phone call was used by the percentage of (0.9%) as shown in figure (2).

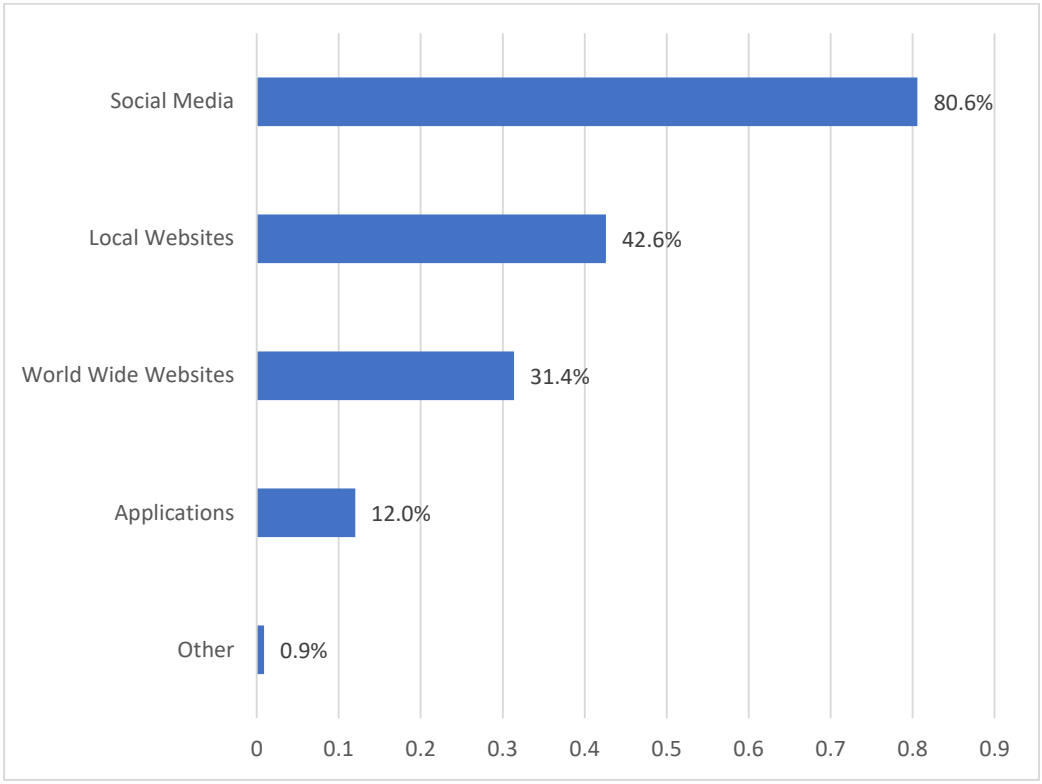

Fig. (2): the platforms used in online shopping
Resource: by author, depending on questionnaire data.
Note: the respondents were allowed to choose more than one option.

Most products bought online before the pandemic were clothes and fashion products at the percentage of (42.6%), and the least of products bought online were cleaning products in the percentage of (2.8%) as in figure (3). while during the pandemic the most products bought online were house and outdoor supplies at the percentage of (43.5%) and food & beverages at the percentage of (42.6%), and the least products online shopped during the pandemic were sports & fitness at the percentage of (9.3%) and other products (6.4%) as shown in figure (4).

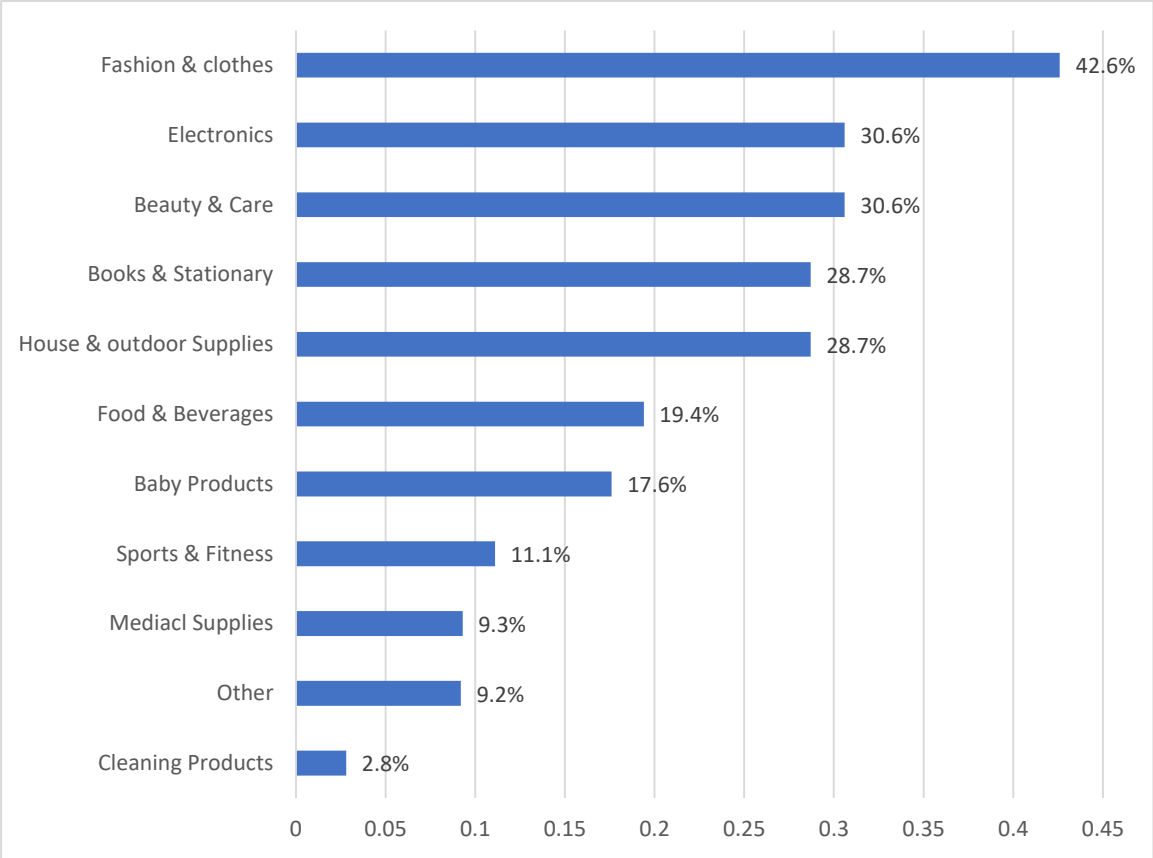

Fig. (3): online shopped products before the pandemic

Resource: by author, depending on questionnaire data.

Note: the respondents were allowed to choose more than one option.

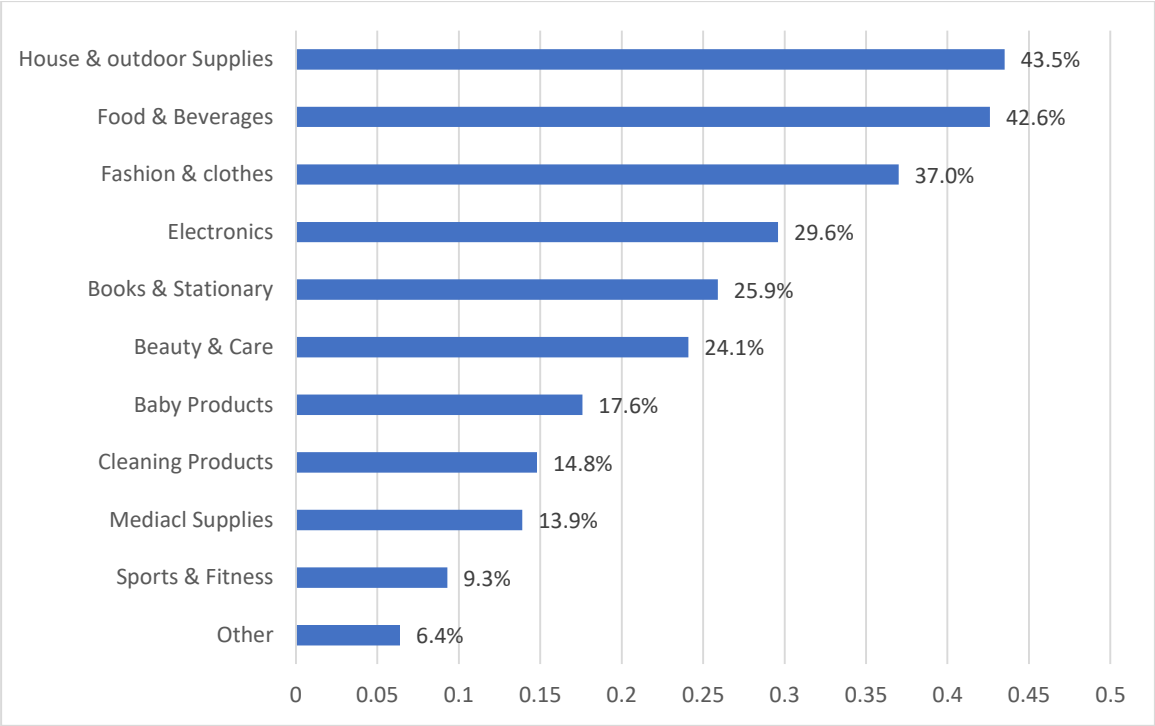

Fig. (4): online shopped products during the pandemic

Resource: by author, depending on questionnaire data.

Note: the respondents were allowed to choose more than one option.

4. THE RESULTS

4.1. Descriptive Statistics of the variables

4.1.1. Descriptive Statistic of COVID-19

The results of SPSS analyzing the collected data indicates that the agreement ratio of the respondents on the independent variable COVID-19 was (64.9 %), and the neutrality ratio was (14.63 %), while the disagreement ratio was (20.47 %). The highest mean in this variable is the phrase (X6) which is (online shopping can reduce the risk of being infected) and it is (4.32) with (0.87) as its standard deviation, meanwhile the lowest mean is (X9) which is (prices of the products have not changed after the pandemic happened) and it is (2.06) with standard deviation reached (0.90).

Table (5): Descriptive Statistic of COVID-19

phrases	Respondents measuring										Mean	STD
	Strongly agree		agree		Neutral		disagree		Strongly disagree			
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
X1	15	13.9	68	63.0	13	12.0	10	9.3	2	1.9	3.78	0.87
X2	5	4.6	17	15.7	29	26.9	48	44.4	9	8.3	2.64	1.00
X3	25	23.1	65	60.2	10	9.3	7	6.5	1	0.9	3.98	0.82
X4	10	9.3	64	59.3	16	14.8	13	12.0	5	4.6	3.56	0.98
X5	38	35.2	40	37.0	20	18.5	8	7.4	2	1.9	3.96	1.00
X6	55	50.9	40	37.0	8	7.4	3	2.8	2	1.9	4.32	0.87
X7	25	23.1	53	49.1	17	15.7	10	9.3	3	2.8	3.81	0.99
X8	35	32.4	50	46.3	14	13.0	8	7.4	1	0.9	4.02	0.92
X9	1	0.9	9	8.3	14	13.0	56	51.9	28	25.9	2.06	0.90
X10	37	34.3	49	45.4	17	15.7	1	0.9	4	3.7	4.06	0.94
Average		22.77		42.13		14.63		15.19		5.28	3.62	0.93
Total		64.9				14.63		20.47				

Resource: by author, depending on SPSS results.

4.1.2. Descriptive Statistic of convenience

The results of SPSS analyzing the collected data indicates that the agreement ratio of the respondents on the dependent variable (online shopping)'s first factor (convenience) was (43.69 %), and the neutrality ratio was (18 %), while the disagreement ratio was (38.35 %). The highest mean in this factor is the phrase (X15) which is (there are some products you occasionally need are available online only) and it is (3.99) with (1.01) as its standard deviation, meanwhile the lowest mean is (X16) which is (you can easily return products you bought online) and it is (2.22) with standard deviation reached (0.88).

Table (6): Descriptive Statistic of convenience

phrases	Respondents measuring										Mean	STD
	Strongly agree		agree		neutral		disagree		Strongly disagree			
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
X11	2	1.9	38	35.2	25	23.1	38	35.2	5	4.6	2.94	0.98
X12	6	5.6	28	25.9	20	18.5	46	42.6	8	7.4	2.80	1.08
X13	6	5.6	49	45.4	20	18.5	31	28.7	2	1.9	3.24	0.99
X14	4	3.7	29	26.9	18	16.7	41	38.0	16	14.8	2.67	1.14
X15	36	33.3	50	46.3	10	9.3	9	8.3	3	2.8	3.99	1.01
X16	2	1.9	5	4.6	29	26.9	51	47.2	21	19.4	2.22	0.88
X17	10	9.3	65	60.2	14	13.0	17	15.7	2	1.9	3.59	0.93
Average	8.76		34.93		18		30.81		7.54		3.06	1
Total	43.69				18		38.35					

Resource: by author, depending on SPSS results.

4.1.3. Descriptive Statistic of time-saving

The results of SPSS analyzing the collected data indicates that the agreement ratio of the respondents on the dependent variable (online shopping)'s second factor (time-saving) was (67.8 %), and the neutrality ratio was (15.54 %), while the disagreement ratio was (16.66 %). The highest mean in this factor is the phrase (X19) which is (you can buy products anytime 24 hours a day in online shopping) and it is (4.03) with (0.91) as its standard deviation, meanwhile the lowest mean is (X18) which is (you usually get your online order on time) and it is (3.01) with standard deviation reached (1.09).

Table (7): Descriptive Statistic of time-saving

phrases	Respondents measuring										Mean	STD
	Strongly agree		agree		neutral		disagree		Strongly disagree			
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
X18	3	2.8	45	41.7	20	18.5	30	27.8	10	9.3	3.01	1.09
X19	33	30.6	57	52.8	7	6.5	10	9.3	1	0.9	4.03	0.91
X20	33	30.6	55	50.9	9	8.3	6	5.6	5	4.6	3.97	1.02
X21	24	22.2	41	38.0	25	23.1	17	15.7	1	0.9	3.65	1.03
X22	23	21.3	52	48.1	23	21.3	9	8.3	1	0.9	3.81	0.90
Average	21.5		46.3		15.54		13.34		3.32		3.69	0.99
Total	67.8				15.54		16.66					

Resource: by author, depending on SPSS results.

4.1.4. Descriptive Statistic of web design & literacy

The results of SPSS analyzing the collected data indicates that the agreement ratio of the respondents on the dependent variable (online shopping)'s third factor (web design and literacy) was (52.16 %), and the neutrality ratio was (25.93 %), while the disagreement ratio was (21.94 %). The highest mean in this factor is the phrase (X23) which is (the websites design helps in searching and selecting the right product) and it is (3.83) with (0.76) as its standard deviation,

meanwhile the lowest mean is (X25) which is (most websites provide all the details about their products accurately) and it is (3.02) with standard deviation reached (0.88).

Table (8): Descriptive Statistic of web design & literacy

Phrases	Respondents measuring										Mean	STD
	Strongly agree		agree		Neutral		disagree		Strongly disagree			
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
X23	12	11.1	75	69.4	14	13.0	5	4.6	2	1.9	3.83	0.76
X24	6	5.6	35	32.4	45	41.7	22	20.4	-	-	3.23	0.84
X25	7	6.5	34	31.5	25	23.1	38	35.2	4	3.7	3.02	1.04
Average		7.73		44.43		25.93		20.07		1.87	3.36	0.88
Total		52.16				25.93		21.94				

Resource: by author, depending on SPSS results.

4.1.5. Descriptive Statistic of security

The results of SPSS analyzing the collected data indicates that the agreement ratio of the respondents on the dependent variable (online shopping)'s fourth factor (security) was (49.86 %), and the neutrality ratio was (18.26 %), while the disagreement ratio was (31.88 %). The highest mean in this factor is the phrase (X30) which is (the possibility of customers being exposed to frauds concerning the products quality differences between the ones on the website and the actual received products increases in online shopping) and it is (4.12) with (0.88) as its standard deviation, meanwhile the lowest mean is (X32) which is (you feel safe concerning the quality of products in online shopping) and it is (2.67) with standard deviation reached (0.91).

Table (9): Descriptive Statistic of security

phrases	Respondents measuring										Mean	STD
	Strongly agree		agree		neutral		disagree		Strongly disagree			
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
X26	3	2.8	31	28.7	24	22.2	41	38.0	9	8.3	2.80	1.04
X27	1	0.9	51	47.2	14	13.0	34	31.5	8	7.4	3.03	1.06
X28	6	5.6	60	55.6	22	20.4	16	14.8	4	3.7	3.44	0.94
X29	20	18.5	55	50.9	15	13.9	13	12.0	5	4.6	3.67	1.06
X30	38	35.2	53	49.1	12	11.1	2	1.9	3	2.8	4.12	0.88
X31	5	4.6	31	28.7	19	17.6	42	38.9	11	10.2	2.79	1.11
X32	1	0.9	22	20.4	32	29.6	46	42.6	7	6.5	2.67	0.91
Average		9.78		40.08		18.26		25.67		6.21	3.22	1
Total		49.86				18.26		31.88				

Resource: by author, depending on SPSS results.

4.2. Correlation Statistics

From analyzing the collected data using SPSS, the results show that there is no significant correlation between the independent variable (COVID-19) and the dependent variable's first factor (convenience), and that declines the first sub-hypothesis of correlation. On the other hand, the results show a high significant correlation between COVID-19 and the rest of online shopping's factors (time-saving, web design and literacy, and security) at the level (0.01) which leads to the acceptance of the main correlation hypothesis and the remained three correlation sub-hypotheses.

Table (10): Correlation Coefficients

Variables	Convenience	Time-saving	Web design & literacy	security	Online shopping
COVID-19	0.153	0.343**	0.410**	0.427**	0.415**
Sig.	0.103	0.000	0.000	0.000	0.000

****** correlation is significant at the 0.01 level

Resource: by author, depending on SPSS results.

4.3. Simple Regression Statistics

From the results shown in table (11) of the simple regression test which explains the effect of COVID-19 on online shopping behavior, there is a significant effect of COVID-19 on online shopping and its factors except for the first factor of the dependent variable (convenience) which shows an insignificant effect. Based on that the first sub-hypothesis of effect will be rejected. And accept the main effect hypothesis and the three remained effect sub-hypotheses. The table also shows that there is a positive and significant effect of COVID-19 on the consumers' time-saving concerning their online shopping behavior, whereas the increase in the COVID-19 ratio in one point will cause the increase of the percentage of the consumers' online shopping preferring and save their time in the percentage of (0.44), moreover the table shows that (t) value which is (3.76) is significant at the level (0.01), and as shown (F) value that reached (14.16) also significant at the level (0.01), this indicates that there is a statistic effect between COVID-19 and time-saving, in addition (R^2) value indicates that the independent variable explains the percentage of (12%) in the change occurred in the dependent variable. As we can see there is a positive and significant effect of COVID-19 on the consumers' literacy in websites and their designs concerning their online shopping behavior, whereas the increase in the COVID-19 ratio in one point will cause to the increase of percentage of the consumers' online shopping preferring and increase their web literacy in the percentage of (0.52), moreover the table shows that (t) value which is (4.62) is significant at the level (0.01), and as shown (F) value that reached (21.36) also significant at the level (0.01), this indicates that there is a statistic effect between COVID-19 and web design and literacy, in addition (R^2) value indicates that the independent variable explains the percentage of (17%) in the change occurred in the dependent variable. Concerning the last factor of the dependent variable (security), there is a positive and significant effect of COVID-19 on the consumers' trust and feeling secure in their online shopping behavior, whereas the increase in the COVID-19 ratio in one point will cause to the increase of percentage of the consumers' online shopping preferring and increase their secure in the percentage of (0.52), moreover the table shows that (t) value which is (4.86) is significant at the level (0.01), and as shown (F) value that reached (23.59) also significant at the level (0.01), this indicates that there is a statistic effect between COVID-19 and security, in addition (R^2) value indicates that the independent variable explains the percentage of (18%) in the change occurred in the dependent variable.

In analyzing the effect of the independent variable COVID-19 on the dependent variable online shopping overall we can notice that there is a positive and significant effect of COVID-19 on the consumers' online shopping behavior, whereas the increase in the COVID-19 ratio in one point will cause to the increase of percentage of the consumers' online shopping in the percentage of (0.40), moreover the table shows that (t) value which is (4.70) is significant at the level (0.01), and as shown (F) value that reached (22.08) also significant at the level (0.01), this indicates that there is a statistic effect between COVID-19 and online shopping, in addition (R^2) value indicates that the independent variable explains the percentage of (17%) in the change occurred in the dependent variable.

Table (11): Simple Regression Test

Independent variable / Dependent variable	COVID-19						
	Constant	**Beta**	**t**	**Sig.**	**R^2**	**F**	**Sig.**
Convenience	2.377	0.19	1.65	0.103	0.3	2.71	0.103
Time-saving	2.084	0.44	3.76	0.000	0.12	14.16	0.000
Web design & literacy	1.474	0.52	4.62	0.000	0.17	21.36	0.000
Security	1.326	0.52	4.86	0.000	0.18	23.59	0.000
Online shopping	1.842	0.40	4.70	0.000	0.17	22.08	0.000

Resource: by author, depending on SPSS results.

5. DISCUSSION AND CONCLUSION:

The changes we have seen in consumers' behavior moving to online shopping during the lockdown helped to create innovations in E-commerce for many industries. As companies have been working hard to improve their E-commerce experience (delivery times and ways, product descriptions on web pages, or utilizing ratings and reviews across their products and using them to solve problems and services updates) it is interesting to find out whether once Covid-19 is over these consumers keep shopping online, or if they will return to shopping in retails as we see now the lockdown is over yet, many consumers still rely on online shopping and sometimes prefer it over physical shopping.

The effects of COVID-19 have changed the perspectives of consumers on a significant scale. The shopping behavior of consumers has shifted a lot from local stores to online markets. As the pandemic is still on run, therefore a lot of people prefer to maintain social distance, and others don't mind the gatherings and don't maintain social distance but still prefer online shopping over physical shopping because of the limitation of their time and convenience reasons. It can be stated that consumers' shopping and financial behavior will not be same as pre- pandemic and businesses have to change in accordance.

The COVID-19 pandemic is considered to have affected consumer behavior worldwide, impacting local and global economies. Studies have shown that consumer behavior has changed in response to the pandemic. Thus, many businesses are (have) innovating (innovated) to adapt to the new circumstances.

In a study by Ali (2020), which examined the sales of Samsung electronics devices during the pandemic, concluded that in-stores sales were dropped by -14%, whereas online sales exhibited a sharp increase of 700%. While another study conducted by Salman & Sahi (2017), that studied consumer behavior in E-shopping in Iraq, it showed that 47% of Iraqis never tried E-shopping.

The results of the current study show that, consumers' behavior regarding online-shopping rate increased and financial behavior have changed since consumers now increased their savings and limited their expenditures. In addition, this study points out that before the pandemic most products purchased online were clothes and fashion products, and the least purchased products were cleaning products, whereas during the pandemic, the majority of the products purchased online were house and outdoor supplies, and the least purchased category was sports and fitness products.

According the results of the study, it is evident that the majority of consumers do their online shopping through social media platforms, which are known for their unreliability. This will cause the distrust of the consumers in Online shopping that leads to the decrease in relying consumers on Online shopping.

Most of the respondents prefer physical shopping over online shopping for some reasons mainly, because they do not trust all the websites concerning products quality and the differences in the products size and color between the viewed pictures in the websites and reality, some of the respondents enjoy physical shopping that's why they prefer it over online shopping. While a less percentage of the respondents prefer online shopping for its less costs and less time and efforts.

The research suggests that since consumers increased their dependence on online shopping during the pandemic, the markets and businesses in Kurdistan region – Iraq should consider innovation in their online services, delivery timing and packaging in order to offer and present the best service to their customers and keep in competition in the markets. Moreover the author suggest to the companies that instead of relying only on social media in selling products they should also provide trusted websites or/and applications that contain all the possible details about the products that would build trust and security to the consumers and reduce the rate of fraud in online shopping.

6. REFERENCES:

Ahmed, Amanj Mohamed. (2020). *Consumer Behavior Toward the Use of Credit Cards: The Empirical Evidence from Iraq*. Journal of Economics and Business, 5 (1).

Ali, Bayad, (2020), *Impact of COVID-19 on consumer buying behavior toward online shopping in Iraq*, Economic studies Journal, Vol (18), Issue (3).

Alreck, P. L. (1988). *The Effect of Temporic Traits on Retail Buying*. *Retailing: It's Present and Future*, Academy of Marketing Science and the American Collegiate Retailing Association.

Biener, C. & Eling, M. & Wirfs, J.H., (2015). *Insurability of cyber risk: An empirical analysis*, The Geneva Papers on Risk and Insurance-Issues and Practice 40, 1, 131-158, DOI: 10.1057/gpp.2014.19.

Brown, Lew, G. (1989). *The strategic and tactical implications of convenience in consumer product marketing*. Journal of Consumer Marketing, 6 (3).

Bucko, Jozef & Lukáš Kakalejčík, & Martina Ferencová. (2018). *Online Shopping: Factors that Affect Consumer Purchasing Behaviour*. *CogentBusiness and Management Journal*, 5 (1).

Cao.Q., & Dowlatshahi.S. (2005), *The impact of alignment between virtual enterprise and information technology on business performance in an agile manufacturing environment*, Journal of Operations Management, (23).

Cherry, J.D. (2004), *The chronology of the 2002–2003 SARS mini pandemic.* Paediatr. Respir.

Copeland, M.T. (1923). *Relation of consumers' buying habits to marketing methods*. Harvard Business Review, 1(2).

European Union, (accessed on 14 May 2020). *COVID-19 Restriction Measures. 2020*. Available online: https://reliefweb.int/map/italy/european-union-covid-19-restriction-measures-dg-echo-daily-map-20042020

European Union, (accessed on 4 June 2020), *Joint European Roadmap towards Lifting COVID-19 Containment Measures. 2020*. Available online: https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/european- roadmap-lifting-coronavirus-containment-measures

Gupta, P., Dubey, A., (2016). *E-Commerce-Study of Privacy, Trust and Security from Consumer's Perspective*, International Journal of Computer Science and Mobile Computing 5 (6).

Ingaldi, M. & Ulewicz, R., (2019). *How to Make E-Commerce More Successful by Use of Kano's Model to Assess Customer Satisfaction in Terms of Sustainable Development*, Sustainability 11(18), Art. No:4830, DOI: 10.3390/su11184830.

Jarvenpaa, S. L. & Todd, P. A. (1997), *Consumer Reactions to Electronic Shopping on the World Wide Web*, International Journal of Electronic Commerce 1 (2), 1996/97.

Lindquist, J. D. & C. F. Kaufman-Scarborough (2004), *Poly- chronic tendency analysis: a new approach to understanding women's shopping behaviors*, The Journal of Consumer Marketing 21(4/5).

Moran, Nora, (2020), *Illusion of Safety: How Consumers Underestimate Manipulation and Deception in Online vs. offline Shopping*

Contexts. Journal of Consumer Affairs. https://doi.org/10.1111/joca.12313

Queiroz, M. M. & Ivanov, D. & Dolgui, A. & Fosso Wamba, S. (2020). *Impacts of epidemic outbreaks on supply chains: mapping a research agenda amid the COVID-19 pandemic through a structured literature review.* In Annals of Operations Research (Issue 0123456789). Springer US. https://doi.org/10.1007/s10479-020-03685-7

Rahman, Mohammad Anisur & Islam, Md Aminul & Esha, Bushra Humyra & Sultana, Nahida & Chakravorty, Sujan. (2018), *Consumer Buying Behavior Towards Online Shopping: An Empirical Study on Dhaka City, Bangladesh*, Cogent Business and Management, 5 (1).

Richbell, S. & V. Kite, (2007), *Night shoppers in the "open 24 hours" supermarket: a profile*, International Journal of Re- tail & Distribution Management 35 (1).

Salman, Ahmed Abdullah & Sahi, Alaa Mahdi, (2017), *Understanding Consumer Behavior in E-shopping: A Case Study of Iraq with an overview of E-shopping in the global and Arab regions*, JETIR Journal, VOL (4), Issue (11).

Soopramanien, Didier, (2011), *Conflicting Attitudes and Scepticism Towards Online Shopping: The Role of Experience*. International Journal of Consumer Studies, 35 (3).

Sullivan, Yulia W. & Dan J. Kim., (2018), *Assessing the Effects of Consumers' Product Evaluations and Trust on Repurchase Intention in E-commerce Environments.* International Journal of Information Management, 39.

Taylor, S. & Todd, P. A. (1995), *Understanding Information Technology Usage: A Test of Competing Models*, Information Systems Researches ,6(2).

Triandis, H. C., (1997), *Interpersonal Behavior*, Wadsworth Publishing Company, Belmont, CA.