

Examining the Influence of COVID 19 Pandemic in Changing Customers' Orientation towards E-Shopping

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Abstract

Current study aimed at examining the change in customer behavior during COVID 19 pandemic towards e-shopping. Variables taken into perspective included (Frequency, Necessity, Method of Payment, Price, and Availability of Product/Service). A simple random sample of (500) citizens in Jordan were exposed to an online questionnaire regarding their consuming behavior before and after the pandemic. Results of study indicated the COVID19 pandemic managed to change customer behavior towards depending more on online shopping and e-payment methods during COVID19 pandemic and the circumstances of lockdown and quarantine, in addition to that, results of pre and post behavior indicated that the influence appeared to be more influenced by gender and academic qualification as females' behavior appeared to be more influential and those who held a diploma. Study recommended that companies need to develop effective marketing strategies and enhance their presence in the e-commerce sector.

However, one question remained unanswered; will society's behavior change after the pandemic's demise, and will this behavior turn into an economic mind that measures things in numbers?

Keywords: e-shopping, pandemic, customer behavior, intention, payment-method, online payment

1. Introduction

Each society has its own culture and civilization, and this culture is formed over hundreds of years, and its personality is formed in comparison to other societies (Pandža Bajš, 2015). According to Kumar et al (2016), the culture and civilization of society is the set of prevailing values, customs, traditions and beliefs, and civilization consists of two elements, one of which is abstract or moral, and is represented in the fundamental values of society, its customs, traditions and beliefs, and the other element is material it is the material product of the members of society, and the continuous interaction between society and the individual leads to the formation of the individual's purchasing and consumer preferences in a way that is compatible with the fundamental values of society, and accordingly the types of products that society is allowed to be purchased and consumed are determined, and these fundamental values of society enjoy the obligation where no individual can deviate from them (Jaakkola and Alexander, 2014). For example, there are some societies whose civilization allows them to eat dog meat and pigs, as some societies allow to eat fish meat alive or to eat frogs, and these behaviors are unacceptable in other societies, especially Islamic societies because their intrinsic values do not recognize this and do not allow it. Based on that, Shah et al (2014) noted that the purchase behavior of individuals is bound to the values and traditions of their societies and do not contradict them, as a result, it can be said that the values of society, its beliefs, customs and traditions in the general behavior of its members constitute their purchasing behavior.

According to Wang (2015), the flow of information regarding a certain change in the environment influences the consumer behavior in a massive way, on the other hand Voinea and Filip (2011) noted that the frequency and availability of goods/services can influence the way a customer behaves; when a certain item is scarce and not available; customers tend to hoard this item to avoid the trouble of looking for it. Czarniewski (2014) also suggested that some aspects can change customers' behavior like prices and methods of payment; customers tend to adopt a new behavior as soon as they find the financial methods are suitable for them.

From that point, current study seeks to examine the influence of COVID 19 pandemic and the quarantine situation in changing customers' behavior to e-shopping and using electronic approaches to purchase items. Variable used in current study depended on drivers of customer behavior change including (Frequency, Necessity, Method of Payment, Price, and Availability of Product/Service).

Following model represented the relationship that gathered the variables together:

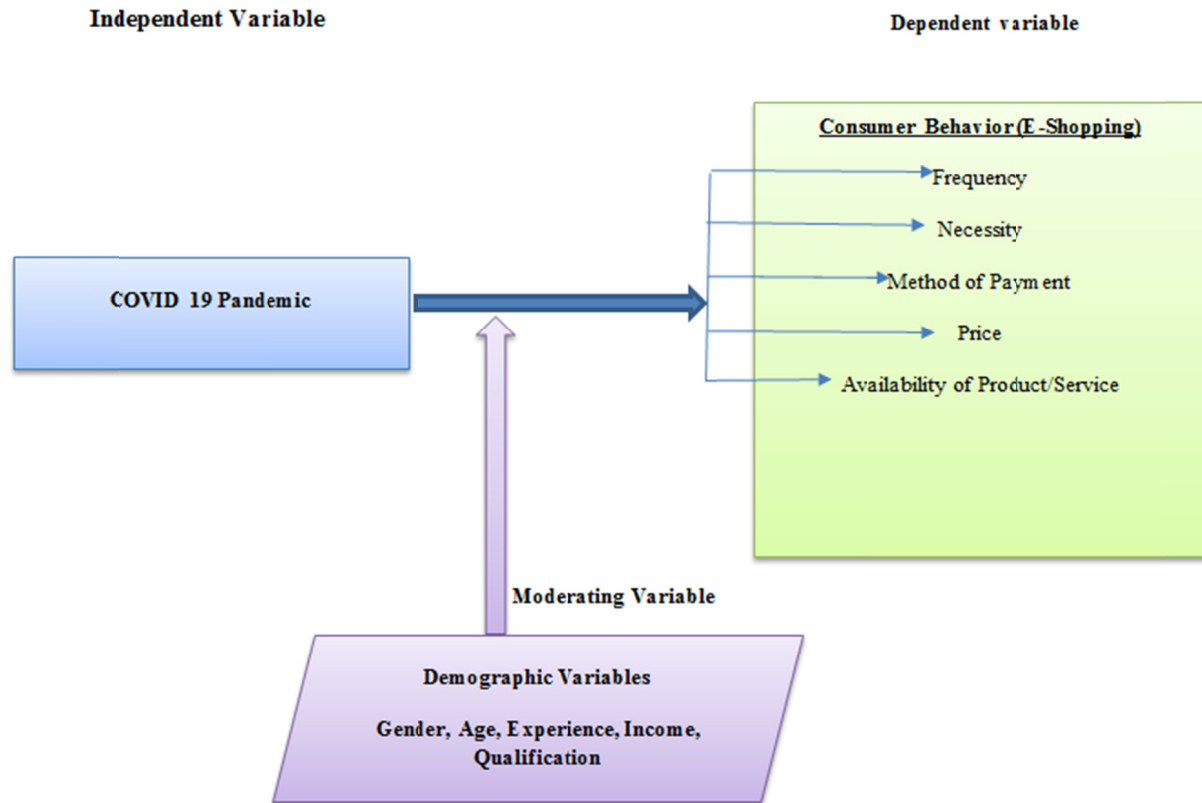


Figure 1. Study Model

From above model, following hypotheses were extracted:

H1: COVID 19 had an influence over customer behavior through increasing the tendency towards e-shopping

H2: Attitudes toward over Customer behavior (e-shopping) after the appearance of COVID19 are not changed due to demographics of individuals

From that point, current study hypothesize that due to the limited movement among individuals that was restricted during the overall lockdown in Jordan due to VOCID19 virus; customer behavior changed dramatically and their interest, intention and behavior leaned more towards the use of e-shopping methods through multiple websites and online platforms which were built on the bases of online payment.

2. Literature Review

2.1 Customer Behavior

Behavior is generally defined as the way in which living organisms deal and act with environmental conditions through an activity whose purpose is to modify or change these conditions, so that they are appropriate to them and their requirements in order to be able to live and survive (Han et al, 2015).

Before referring to the definition of consumer behavior, the concept of 'consumer' must be defined first, Kannan et al (2015) defined consumer/ customer as "a person who buys or has the ability to purchase goods and services offered for sale, with the aim of satisfying personal or family needs and desires, Juaneda-Ayensa et al (2016) noted that a customer is divided into two types, the first type is a person/ individual who purchases goods that they need for their personal or family use, while the other type is the industrial customer which includes all

private and public organizations that search for products and purchase them for use in achieving their goals and future plans.

It is understood from this definition that every person is considered a consumer/customer, so that the primary motivation for them is to satisfy their needs and desires according to what is available in the market on one hand, and according to their financial and cognitive capabilities and purchasing abilities on the other hand (Yu et al, 2017).

2.2 Definition of Customer Behavior

As for consumer behavior, scholars presented many definitions that helped to give overall definitions for the concept, among them Echchakoui (2016) who stated that consumer's behavior is defined as the behavior that the consumer highlights in the search for buying or using goods, services and ideas, which he expects will satisfy his desires or needs according to his available purchasing capabilities, also, Moon et al (2015) saw that customer behavior is all direct and indirect actions and behaviors that consumers perform in order to obtain a good or service in a specific place and at a specific time. From another perspective Singh and Singh (2015) defined customer behavior as the set of mental and muscular activities related to the evaluation and differentiation process, and obtaining goods, services, ideas, and how to use them.

2.3 Constituents of Customer Behavior

Constituents of customers' behavior is usually influenced and infused by the culture and society that people live in Jung and Yoo (2017), this managed the culture to have a deep impact on how consumers behave in reference to purchase behaviors and intentions. Juaneda-Ayensa et al (2016) argued that customer behavior might be bound to many factors that shapes its final frame, among these factors are the external environmental factors for the consumer; such factors include the external environmental influences that affect the consumer, which are civilizational and cultural influences, social influences, situational influences and marketing influences. Echchakoui (2016) saw that society culture determines the form and philosophy of consumption for its members through the values and beliefs that forms it. For example, the philosophy of consumption in Western societies focuses on material well-being and aims to maximize recreational consumption in the world, while consumer philosophy in Islamic societies reduces the over-exploitation of material enjoyment and requires the individual to maintain a balance between the material and the spiritual side of their life.

Sweeney et al (2015) argued that Islamic culture, for example, prohibits the consumption of or trade in some foodstuffs, such as blood, pork, and wines, as the Hindu culture prohibits the slaughter and eating of cows, Consumers buy products according to the culture of their societies, for reasons including:

- Consumers believe that the purchased good or service will do its best job.
- Buying the commodity for its shape, form and image.
- Buying a commodity for its symbolic meaning, such as the association of some foods with the religious and national occasions of society.
- The influence of social classes on consumer behavior.

Others scholars saw that constituents of customer behavior is something that can't be defined easily, sometimes customer behavior is influenced by other factors than society including desires, needs, motives, cognitive skills, learning abilities, awareness, and many other factors that in overall would help in defining what constitute the behavior of customers Zhang and Benyoucef (2016); De Mooij (2019); Claiborne and Sirgy (2015); and Sudbury-Riley and Kohlbacher (2016).

2.4 The Shift towards E-Payment Methods

Mathras et al (2015) emphasized that there is a clear change on the shopping habits of individuals, which became clear more during the past years with the spread of smart and Internet-based mobile devices in all their features, which led to the explosion of electronic commerce and the high level of electronic payment by individuals. Previously, shopping in a store and paying in cash was a common method of commerce that today, shopping through the Internet and relying on electronic payment cards has become a distinctive feature of this era in a way that is - and radically - the behavior of consumers around the world.

One of the important drivers that contributed to the spread of the concept of payment through the Internet was coupled with electronic commerce, which has evolved and has become opportunities for consumers to obtain their needs without the need to move from one place to another and therefore only content with sitting at home and requesting services, goods and goods until Threshold of their house through electronic payment and the use of various bank payment cards (Dakduk et al, 2017).

This tendency towards relying on electronic payment has become an advantage of development and openness, and avoiding cash payment, as there is no need for direct dealing with currencies as long as there is an approved electronic payment method that meets the purpose, and this was in the normal state of countries (Tankovic and Benazic, 2018). Although the World Health Organization confirmed that the emerging coronavirus is transmitted through coughing and sneezing spray, it stressed the ability to transmit it across surfaces and paper currencies which created a huge boost among individuals to deeply embrace e-shopping and e-payments methods as an approach to get all they need from goods and services with the privilege of not using paper money and expose themselves to the dangers of getting infected by the virus (Lin et al, 2018).

3. Hypotheses Building

3.1 Frequency

It is evident from the various reports that sales in the markets of consumer goods and products (food commodities, beverages, refreshments, cosmetics, cleaning materials, etc.) have increased remarkably since the beginning of the year 2020 to mid-century due to the quarantine conditions that accompanied the pandemic, which forced many individuals to rush to the markets. Because of the complete closures that various countries have exercised over their sectors (Lim, 2015). Calder et al (2016) stated that in the stage of partial openness, individuals have always avoided mixing and leaving by purchasing their most necessary supplies and relying on electronic payment methods without using regular money. So, this explains the changes in customer behavior during the pandemic to the decrease in the frequency of shopping and attributed to the quarantine and lockdown that was imposed by the government in the country.

3.2 Necessity

Lantos (2015) confirms that consumer behavior is greatly affected by the environmental conditions surrounding it, both inside the home, that within the entire country, as the consumer usually tends during exceptional circumstances to change the consumption pattern towards necessities more than luxuries as a way to regulate expenses and not reach the stage of inability to Securing basic requirements (Campbell and Frei, 2010).

4. Method of Payment

Data pointed out that the fears and dismay of the Corona pandemic led to changes in consumption patterns, as the restrictions imposed on citizens in last April 2020 and obliged the conditions of movement and shopping in a limited geographical area have prompted them to buy their needs from the Internet using electronic payment methods such as cards Credit, PayPal, and so on, which led to an increase in the sales of many stores that offer online shopping services during the first five months of 2020 by a very high rate (Jiang and Chen, 2016). This indicates that the surrounding environmental conditions will affect the behavior of the consumer and push him to reach his needs and desires through electronic payment and shopping methods as long as the service is present and available by the banks that are dealing with it, thus developing the hypothesis that supports the fact that during the pandemic citizens became more dependent on payment methods that doesn't require them to move from one place to another.

4.1 Price

Zhang et al (2017) Indicates that changes in the internal environment of consumers, whether in terms of prices, supply and demand, forced many individuals to change consumption patterns that they have been accustomed to for decades because of the unprecedented price hikes that their markets may witness, especially food, whether produced locally or imported. Consequently, this change in the market and the rise in prices may cause individuals to gradually liberate themselves from consumption habits that no longer fit their income and price increases (Vazifedoost et al, 2013). Also, the significant decline that markets may experience as a result of higher living standards in addition to fixed wages may force individuals to change their consumption habits and purchasing patterns (Lu et al, 2010). Öğüt and Onur Taş (2012) added that the changing consumer behavior of citizens is important, even if there is no rise in prices, because this is in the interest of the consumer in terms of controlling its expenditures and not wasting supplies and contributing to controlling the market through moderate demand.

From that point, we can say that changes in Jordanian customer behavior during COVID 19 pandemic was influenced by the prices which made them to make purchase decisions through e-payment portals and methods.

4.2 Availability of Product/Service

Steinhart et al (2013) argued that the availability of products and services plays a huge role in changing customer behavior. Authors argued that the availability of products online or through the website may trigger the purchase intention in a customer to make online purchase decisions that are supported by online payment methods.

4.3 Methods

Current study adopted quantitative approach in order to realize hypotheses presented before. A questionnaire was developed and appeared in two main sections; the first took into account demographics of study sample, while the other section of questionnaire consisted of statements related to variables of study in two main parts (Pre-COVID 19 and Post-COVID 19) in order to measure the difference of behavior during the two periods of times. Population of study consisted of all Jordanian consumers during the first half of 2020. A simple random sample of (580) individuals were exposed to the online version of the questionnaire which was uploaded on Google forms. After leaving the questionnaire for 7 weeks online, researcher found total of (500) questionnaires which were properly filled and ready to be exposed to statistical analysis with a response ratio of 86.2%.

Cronbach alpha is used to test the reliability of the scale, it is found that $\alpha = 0.967$ reflects that the questionnaire is reliable since it is greater than accepted percent 0.60 (Sekaran & Bougie, 2016).

5. Analysis and Discussion

5.1 Demographics

Table 1. Sample Characteristics According to Demographics

		<i>Gender</i>			
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Valid	Male	263	52.6	52.6	52.6
	Female	237	47.4	47.4	100.0
	Total	500	100.0	100.0	
		<i>Age</i>			
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Valid	18-28	58	11.6	11.6	11.6
	29-39	109	21.8	21.8	33.4
	40-50	158	31.6	31.6	65.0
	+51	175	35.0	35.0	100.0
	Total	500	100.0	100.0	
		<i>Frequency of E-Shopping</i>			
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Valid	Once/month	30	6.0	6.0	6.0
	Twice/month	83	16.6	16.6	22.6
	3times/month	147	29.4	29.4	52.0
	+4 times/month	240	48.0	48.0	100.0
	Total	500	100.0	100.0	
		<i>Income/\$</i>			
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Valid	-500	27	5.4	5.4	5.4
	501-750	77	15.4	15.4	20.8
	751-1000	181	36.2	36.2	57.0
	+1001	215	43.0	43.0	100.0
	Total	500	100.0	100.0	

		<i>Education</i>			
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Valid	HighSchool	21	4.2	4.2	4.2
	Diploma	127	25.4	25.4	29.6
	BA	198	39.6	39.6	69.2
	Higher Studies	154	30.8	30.8	100.0
	Total	500	100.0	100.0	

Table 1 above showed mean and standard deviation of sample characteristics according to demographics; it appeared through analysis that majority of sample responded to the questionnaire was males forming 52.6% of total sample with frequency 263 individuals which can be attributed to the fact that usually within the Jordanian culture it is the man who takes care of the household needs and necessities. On the other hand, and looking at the age of respondents, it appeared that majority of sample 51% were older than 51 years old compared to individuals within the age range of 18-28 years old forming 11.6% of total sample.

When respondents were asked regarding the frequency of their behavior in depending on e-shopping to get their needs; results of study showed that 48% was the majority of sample respondents who depended on e-shopping to get their needs more than 4 times a month, this indicated that the culture of e-shopping and e-payment methods are known and accepted among the Jordanian culture. This was explained when results indicated that 43% of respondents had an income of more than \$1001 compared to those who had an income of less than \$500 forming 6.4% of total sample. As for education, it was seen that majority of sample responded to the questionnaire 39.6% had an MA degree compared to those who had a diploma forming 4.2% of total sample.

5.2 Questionnaire Analysis

Table 2. Descriptive Statistics of Customer Behavior Pre-COVID19

		<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
<i>Consumer Behavior (E-Shopping)</i>						
<i>Pre-COVID19</i>						
<i>Frequency</i>						
I usually go shopping twice a month	.1	500	1	5	3.96	1.294
I tend to use coupons within stores that accepts it	.2	500	1	5	3.81	1.407
I go shopping every time I find myself free	.3	500	1	5	3.61	1.582
My shopping behaviors are all organized and dated	.4	500	1	5	4.18	1.260
My shopping frequency changes according to my situation	.5	500	1	5	4.17	1.255
<i>Necessity</i>						
Unless it's food or medicine then it is not necessary	.6	500	1	5	4.21	1.249
Would buy complementary items if on discount	.7	500	1	5	3.69	1.373
I go shopping to have fun and enjoy friends' company	.8	500	1	5	3.71	1.416
I tend to try new items that I don't need	.9	500	1	5	3.70	1.315
I follow all my expenses on monthly bases	.10	500	1	5	3.76	1.283

<i>Method of Payment</i>					
I only pay in cash .11	500	1	5	4.16	1.025
I am a user-friendly of card payments .12	500	1	5	3.64	1.417
My card supports e-shopping and I don't intend to visit my bank to promote it .13	500	1	5	3.65	1.419
I trust online payment methods .14	500	1	5	4.02	1.198
Scam is a big pet peeve for me .15	500	1	5	3.81	1.341
<i>Price</i>					
I compare item prices between different stores .16	500	2	5	4.13	1.023
I don't buy unnecessary items unless it's on discount .17	500	1	5	4.06	1.068
I chose local products as they're less expensive than imported ones .18	500	1	5	4.11	1.107
I am willing to pay extra for food and medicine .19	500	1	5	3.85	1.222
I'm not willing to buy items that prices changed over time, I look for alternatives .20	500	1	5	3.94	1.154
<i>Availability of Product/Service</i>					
I usually look for an item online .21	500	1	5	3.94	1.108
If the item isn't available in stores and don't look for it on websites .22	500	1	5	3.74	1.256
If the item appeared to be necessary I would look for it online .23	500	1	5	3.93	1.467
I don't buy items online unless its cash on delivery .24	500	1	5	4.22	1.386
If the items isn't available in the market .25	500	1	5	4.21	1.286
Valid N (listwise)	500				

Above table 2 presented mean and standard deviation of questionnaire statements as according to respondents' answers to Consumer Behavior (E-Shopping) Pre-COVID19 ; it was seen through analysis that all respondents had a positive attitude towards statements of questionnaire considering that all statements scored higher than mean of scale 3.00 and was seen to be statistically positive.

As in the following table 3, it was also seen that respondents' attitude towards Consumer Behavior (E-Shopping) Pre-COVID19 appeared to be also positive given that all variables chosen in current study scored higher than mean of scale 3.00 which is statistically a positive result.

Table 3. Descriptive Statistics

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Frequency_pre-COVID19	500	1.00	5.00	3.9460	1.01746
Necessity_pre-COVID19	500	1.60	5.00	3.8152	1.04324
Method of Payment_pre- COVID19	500	1.40	5.00	3.8572	1.10143
Price_pre- COVID19	500	1.20	5.00	4.0172	1.01022
Availability of product/service_pre COVID19	500	1.00	5.00	4.0072	.94783
Pre-COVID19	500	1.80	5.00	3.9286	.86130
Valid N (listwise)	500				

Table 4. Descriptive Statistics

		<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
<i>Consumer Behavior (E-Shopping)</i>						
<i>Post-COVID19</i>						
<i>Frequency</i>						
I usually go shopping twice a month	.26	500	1	5	4.59	.942
I tend to use coupons within stores	.27	500	1	5	4.58	.898
that accepts it						
I go shopping every time I find	.28	500	1	5	4.54	.889
myself free						
My shopping behaviors are all	.29	500	1	5	4.32	1.084
organized and dated						
My shopping frequency changes	.30	500	1	5	4.56	.910
according to my situation						
<i>Necessity</i>						
Unless it's food or medicine then it is	.31	500	1	5	3.98	1.144
not necessary						
Would buy complementary items if	.32	500	1	5	3.97	1.098
on discount						
I go shopping to have fun and enjoy	.33	500	1	5	3.92	1.138
friends' company						
I tend to try new items that I don't	.34	500	1	5	4.37	1.019
need						
I follow all my expenses on monthly	.35	500	1	5	4.68	.734
bases						
<i>Method of Payment</i>						
I only pay in cash	.36	500	1	5	4.50	.896
I am a user-friendly of card payments	.37	500	1	5	4.59	.942
My card supports e-shopping and I	.38	500	1	5	4.58	.898
don't intend to visit my bank to						
promote it						
I trust online payment methods	.39	500	1	5	4.54	.889
Scam is a big pet peeve for me	.40	500	1	5	4.32	1.084
<i>Price</i>						
I compare item prices between	.41	500	1	5	4.56	.910
different stores						
I don't buy unnecessary items unless	.42	500	1	5	3.98	1.144
it's on discount						

I chose local products as they're less expensive than imported ones	.43	500	1	5	3.97	1.098
I am willing to pay extra for food and medicine	.44	500	1	5	3.92	1.138
I'm not willing to buy items that prices changed over time	.45	500	1	5	4.37	1.019
Availability of Product/Service						
I usually look for an item online	.46	500	1	5	4.68	.734
If the item isn't available in stores and don't look for it on websites	.47	500	1	5	4.50	.896
If the item appeared to be necessary I would look for it online	.48	500	1	5	4.59	.942
I don't buy items online unless its cash on delivery	.49	500	1	5	4.58	.898
If the items isn't available in the market I look for an alternative	.50	500	1	5	4.54	.889
Valid N (listwise)		500				

Above table 4 presented mean and standard deviation of questionnaire statements as according to respondents' answers to Consumer Behavior (E-Shopping) Post-COVID19 ; it was seen through analysis that all respondents had a positive attitude towards statements of questionnaire considering that all statements scored higher than mean of scale 3.00 and was seen to be statistically positive. However, in the following table 5, it was also seen that respondents' attitude towards Consumer Behavior (E-Shopping) Post-COVID19 appeared to be also positive given that all variables chosen in current study scored higher than mean of scale 3.00 which is statistically a positive result.

Table 5. Descriptive Statistics

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Frequency_post-COVID19	500	1.00	5.00	4.5172	.83823
Necessity_ post -COVID19	500	2.20	5.00	4.1844	.77744
Method of Payment_ post -COVID19	500	1.00	5.00	4.5052	.85935
Price_ post - COVID19	500	2.00	5.00	4.1600	.80569
Availability of product/service_ post - COVID19	500	1.00	5.00	4.5772	.80919
post -COVID19	500	1.80	5.00	4.3888	.72445
Valid N (listwise)	500				

6. Hypotheses Testing

Previously set hypotheses of study were tested, following tables showed results of testing the hypotheses in accordance with study questions.

H1: COVID 19 had an influence over customer behavior through increasing the tendency towards e-shopping

Table 6. Paired Samples Statistics

		<i>Mean</i>	<i>N</i>	<i>Std. Deviation</i>	<i>Std. Error Mean</i>
Pair 1	Frequency_post	4.5172	500	.83823	.03749
	Frequency_pre	3.9460	500	1.01746	.04550
Pair 2	Necessity_post	4.1844	500	.77744	.03477
	Necessity_pre	3.8152	500	1.04324	.04666
Pair 3	Payment_post	4.5052	500	.85935	.03843
	Payment_pre	3.8572	500	1.10143	.04926
Pair 4	Price_post	4.1600	500	.80569	.03603
	Price_pre	4.0172	500	1.01022	.04518
Pair 5	Availability_post	4.5772	500	.80919	.03619
	Availability_pre	4.0072	500	.94783	.04239
Pair 6	post	4.3888	500	.72445	.03240
	pre	3.9286	500	.86130	.03852

Table 7. Paired Samples Test

		<i>Paired Differences</i>						<i>t</i>	<i>df</i>	<i>Sig. (2-tailed)</i>
		<i>Mean</i>	<i>Std. Deviation</i>	<i>Std. Error Mean</i>	<i>95% Confidence Interval of the Difference</i>					
					<i>Lower</i>	<i>Upper</i>				
Pair 1	Frequency_post - Frequency_pre	.57120	1.13779	.05088	.47123	.67117	11.226	499	.000	
Pair 2	Necessity_post - Necessity_pre	.36920	.69277	.03098	.30833	.43007	11.917	499	.000	
Pair 3	Payment_post - Payment_pre	.64800	1.20124	.05372	.54245	.75355	12.062	499	.000	
Pair 4	Price_post - Price_pre	.14280	.61342	.02743	.08890	.19670	5.205	499	.000	
Pair 5	Availability_post - Availability_pre	.57000	.89486	.04002	.49137	.64863	14.243	499	.000	
Pair 6	post - pre	.46024	.73261	.03276	.39587	.52461	14.047	499	.000	

Paired sample t test is used to test above hypothesis, above table shows that the mean for each variable in the Post-COVID19 scale is greater than the mean for each variable in the Pre-COVID19 scale. Also, t value for each variable and the total variables is significant at 0.05 levels, that means:

- COVID 19 had a positive influence over customer behavior through increasing the tendency towards e-shopping
- COVID 19 had an influence over (Frequency) variable used as an indicator for customer behavior through increasing the tendency towards e-shopping
- COVID 19 had an influence over (Necessity) variable used as an indicator for customer behavior through increasing the tendency towards e-shopping

- COVID 19 had an influence over (Method of Payment) variable used as an indicator for customer behavior through increasing the tendency towards e-shopping
- COVID 19 had an influence over (Price) variable used as an indicator for customer behavior through increasing the tendency towards e-shopping
- COVID 19 had an influence over (Availability of Product / Service) variable used as an indicator for customer behavior through increasing the tendency towards e-shopping

H2: Attitudes toward over Customer behavior (e-shopping) after the appearance of COVID19 are changed due to demographics of individuals

Table 8. Multivariate Tests^a

	<i>Effect</i>	<i>Value</i>	<i>F</i>	<i>Hypothesis df</i>	<i>Error df</i>	<i>Sig.</i>
Intercept	Pillai's Trace	.635	170.149 ^b	5.000	490.000	.000
	Wilks' Lambda	.365	170.149 ^b	5.000	490.000	.000
	Hotelling's Trace	1.736	170.149 ^b	5.000	490.000	.000
	Roy's Largest Root	1.736	170.149 ^b	5.000	490.000	.000
Gender	Pillai's Trace	.208	25.704 ^b	5.000	490.000	.000
	Wilks' Lambda	.792	25.704 ^b	5.000	490.000	.000
	Hotelling's Trace	.262	25.704 ^b	5.000	490.000	.000
	Roy's Largest Root	.262	25.704 ^b	5.000	490.000	.000
Age	Pillai's Trace	.026	2.572 ^b	5.000	490.000	.026
	Wilks' Lambda	.974	2.572 ^b	5.000	490.000	.026
	Hotelling's Trace	.026	2.572 ^b	5.000	490.000	.026
	Roy's Largest Root	.026	2.572 ^b	5.000	490.000	.026
Frequency of E-Shopping	Pillai's Trace	.032	3.236 ^b	5.000	490.000	.007
	Wilks' Lambda	.968	3.236 ^b	5.000	490.000	.007
	Hotelling's Trace	.033	3.236 ^b	5.000	490.000	.007
	Roy's Largest Root	.033	3.236 ^b	5.000	490.000	.007
income	Pillai's Trace	.003	.301 ^b	5.000	490.000	.912
	Wilks' Lambda	.997	.301 ^b	5.000	490.000	.912
	Hotelling's Trace	.003	.301 ^b	5.000	490.000	.912
	Roy's Largest Root	.003	.301 ^b	5.000	490.000	.912
Education	Pillai's Trace	.036	3.684 ^b	5.000	490.000	.003
	Wilks' Lambda	.964	3.684 ^b	5.000	490.000	.003
	Hotelling's Trace	.038	3.684 ^b	5.000	490.000	.003
	Roy's Largest Root	.038	3.684 ^b	5.000	490.000	.003

Table 9. Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of				
		Squares	df	Mean Square	F	Sig.
Corrected Model	Frequency_post	28.570 ^a	5	5.714	8.765	.000
	Necessity_post	55.874 ^b	5	11.175	22.466	.000
	Payment_post	27.725 ^c	5	5.545	8.038	.000
	Price_post	59.972 ^d	5	11.994	22.448	.000
	Availability_post	22.148 ^e	5	4.430	7.184	.000
	post	28.801 ^f	5	5.760	12.208	.000
Intercept	Frequency_post	386.637	1	386.637	593.086	.000
	Necessity_post	175.633	1	175.633	353.090	.000
	Payment_post	383.172	1	383.172	555.451	.000
	Price_post	182.882	1	182.882	342.278	.000
	Availability_post	399.346	1	399.346	647.676	.000
	post	295.823	1	295.823	626.966	.000
Gender	Frequency_post	3.957	1	3.957	6.070	.014
	Necessity_post	48.809	1	48.809	98.126	.000
	Payment_post	3.977	1	3.977	5.764	.017
	Price_post	49.541	1	49.541	92.719	.000
	Availability_post	1.698	1	1.698	2.754	.098
	post	14.917	1	14.917	31.615	.000
Age	Frequency_post	1.483	1	1.483	2.275	.132
	Necessity_post	1.375	1	1.375	2.764	.097
	Payment_post	1.713	1	1.713	2.483	.116
	Price_post	1.333	1	1.333	2.495	.115
	Availability_post	.634	1	.634	1.029	.311
	post	1.277	1	1.277	2.706	.101
Frequency of E-Shopping	Frequency_post	2.123	1	2.123	3.257	.072
	Necessity_post	.614	1	.614	1.235	.267
	Payment_post	1.677	1	1.677	2.431	.120
	Price_post	.327	1	.327	.611	.435
	Availability_post	1.871	1	1.871	3.034	.082
	post	.306	1	.306	.648	.421
income	Frequency_post	.107	1	.107	.165	.685
	Necessity_post	.012	1	.012	.025	.876
	Payment_post	.022	1	.022	.031	.859
	Price_post	.000	1	.000	.001	.978
	Availability_post	.004	1	.004	.006	.938
	post	.008	1	.008	.017	.897
Education	Frequency_post	2.382	1	2.382	3.654	.057
	Necessity_post	2.442	1	2.442	4.910	.027
	Payment_post	1.878	1	1.878	2.722	.100
	Price_post	3.988	1	3.988	7.464	.007

	Availability_post	1.366	1	1.366	2.216	.137
	post	2.336	1	2.336	4.951	.027
Error	Frequency_post	322.042	494	.652		
	Necessity_post	245.724	494	.497		
	Payment_post	340.781	494	.690		
	Price_post	263.948	494	.534		
	Availability_post	304.592	494	.617		
	post	233.086	494	.472		
Total	Frequency_post	10553.160	500			
	Necessity_post	9056.200	500			
	Payment_post	10516.920	500			
	Price_post	8976.720	500			
	Availability_post	10802.120	500			
	post	9892.669	500			
Corrected Total	Frequency_post	350.612	499			
	Necessity_post	301.598	499			
	Payment_post	368.506	499			
	Price_post	323.920	499			
	Availability_post	326.740	499			
	post	261.886	499			

a. R Squared = .081 (Adjusted R Squared = .072)

b. R Squared = .185 (Adjusted R Squared = .177)

c. R Squared = .075 (Adjusted R Squared = .066)

d. R Squared = .185 (Adjusted R Squared = .177)

e. R Squared = .068 (Adjusted R Squared = .058)

f. R Squared = .110 (Adjusted R Squared = .101)

MANOVA test is used to test above hypothesis; it is found that Wilks' Lambda value is significant for (Gender, Age, Frequency of E-Shopping and Qualification) variables (except the income variable) at 0.05 levels. That means attitudes toward over Customer behavior (e-shopping) after the appearance of COVID19 are changed due to demographics of individuals (Gender, Age, Frequency of E-Shopping and Qualification).

Also it is found that:

- There are statistical differences in the attitudes toward (Frequency, Necessity, Payment, Price) variables due to gender and these differences tend to increase toward females more than males as shown in the following table:

Table 10. Comparison Attributed to Gender

	<i>Gender</i>	<i>Frequency_post</i>	<i>Necessity_post</i>	<i>Payment_post</i>	<i>Price_post</i>	<i>post</i>
males	Mean	4.4053	3.8776	4.3954	3.8456	4.2041
	N	263	263	263	263	263
	Std. Deviation	.85559	.74919	.89219	.78850	.71433
females	Mean	4.6414	4.5249	4.6270	4.5089	4.5938
	N	237	237	237	237	237
	Std. Deviation	.80221	.65840	.80588	.67079	.68044
Total	Mean	4.5172	4.1844	4.5052	4.1600	4.3888
	N	500	500	500	500	500
	Std. Deviation	.83823	.77744	.85935	.80569	.72445

- There are statistical differences in the attitudes toward (Necessity and Price) variables due to Qualification and these differences tend to increase toward those who are holding diploma more than others, as shown in the following table:

Table 11. Comparison Attributed to Education

	<i>Education</i>	<i>Necessity_post</i>	<i>Price_post</i>	<i>post</i>
High school	Mean	3.6381	3.6857	4.2648
	N	21	21	21
	Std. Deviation	.38791	.33806	.23680
diploma	Mean	4.5890	4.5701	4.7480
	N	127	127	127
	Std. Deviation	.72256	.75048	.47493
BA	Mean	4.0909	4.0919	4.2608
	N	198	198	198
	Std. Deviation	.80242	.81374	.82320
High Studies	Mean	4.0455	3.9740	4.2740
	N	154	154	154
	Std. Deviation	.69640	.75795	.70877
Total	Mean	4.1844	4.1600	4.3888
	N	500	500	500
	Std. Deviation	.77744	.80569	.72445

7. Discussion

Examining the above tables; it was seen that both hypotheses of study were accepted and there appeared to be an influence of COVID19 pandemic on customer behavior towards adopting e-shopping. In examining results of testing the first hypothesis "*H1: COVID 19 had an influence over customer behavior through increasing the tendency towards e-shopping*" the following were asserted:

- COVID 19 had a positive influence over customer behavior along with its adopted variables (Frequency, Necessity, Method of Payment, Price, and Availability of Product/Service) through increasing the tendency towards e-shopping

In other words; results of study indicated that online shopping using a website or application has become an increasingly important base for many consumers in the country, interest in e-shopping for grocery and other basic needs reached its peak in April, before it receded during May, which was expected given the circumstances of the lockdown in many country especially Jordan which has chosen the option of total lockdown for all sectors except healthcare sector which were adopted to accept infected individuals in special medical circumstances.

As for the 2nd hypothesis of study articulated "*H2: Attitudes toward Customer behavior (e-shopping) after the appearance of COVID19 are changed due to demographics of individuals*"; results also supported the fact that

demographics played a role in asserting the change of customer behavior attributed to COVID19 pandemic. Results indicated that the change of customer behavior during the pandemic was attributed to demographic variables mainly gender in which females appeared to be more influence and those who had a diploma in terms of educational level as a demographic variable.

Based on what was mentioned above, study questions were answered and the pandemic of COVID19 played a role in changing customer behavior towards accepting e-shopping and depending on it as a daily life choice. This can be explained as individuals live in a set of circumstances specially designed for new behaviors that they need in their emergency position after the Corona pandemic, so when the right time comes and the days return to their former times, they feel as if they were born again, the isolation may be lengthened or shortened, and it can be said that building the affected souls is one of the variables, unexpected or surprise is available or remains in the chain of normal shifts.

Results of study matched what came along with Gössling et al (2020) when they argued that the emerging corona virus changed the behavior of the consumer and its interests and largely determined commodities, corrected consumer concepts with its keenness to save and save, as far as possible from random expenses, crisis management, resorting to financial planning and spending, and many daily habits decreased through delivery applications and visiting restaurants. The acquisition of all new electronic devices and smart phones, especially as people suffer mainly from a craze for technology, but the majority have changed their programs and behaviors at the economic and social level.

Building on this new consumer behavior in the world during the Covid-19 pandemic, the study drew a change in consumption habits and its contents in the world that might lead to a change in consumer thought. Also, new consumption patterns may become long-term, that is, to continue in the post-pandemic era. This is consistent with what consumers in some countries refer to as they intend to adopt long-term behavioral changes to continue beyond the current situation which appeared to be rhyming with what Roggeveen and Sethuraman (2020) regarding the change in retailing business during the quarantine and lockdown that results from the spread of the pandemic.

In addition, the study demonstrated that new consumption patterns may affect the supply and demand network. For example, when consumers are accustomed to staying at home depending on online shopping, their lifestyles such as "eating at home" may provide more opportunities for the fresh food and grocery delivery industry. The vegetable and fruit markets, which used to be a major offline mode, may turn into an online mode, such as offering online sales and delivery services which came as according with a study by Penela et al (2010).

8. Conclusion and Recommendations

When dangerous indicators begin to appear within societies, they appear dangerous because they threaten the composition of the secure economic fabric, as well as sudden changes in the consumer composition and subjecting many behaviors to accountability and review, there is a very high possibility that touches the realization that many may face questions that they cannot answer, and provides options unaware of its consequences, leaving it without management and control, in light of the spread of the Corona pandemic that has befallen the world.

In fact, the immediate economic impact of the pandemic began to become clear, which contributed to setting a global emergency plan and technology setting goals, disclosing intentions, and activating precautionary and solidarity measures that will protect economies from potential harm and what the world can do about it, but rather about the whole matter.

In this regard, due to the convenience that consumption via the Internet provides while staying at home, and with the generalization and spread of technology and the development of smart phone applications, the digital and electronic aspect of retail business may be strengthened faster than previous expectations worldwide.

Based on the above; current study raises the following questions:

- **Will society's behavior change after the pandemic's demise, and will this behavior turn into an economic mind that measures things in numbers?**

There is a need not to forget that the Corona pandemic has a major impact on the political, economic and social path, and this has contributed to educating people, which makes us believe that its mission is only to monitor the change of our consumer habits.

Based on above results, current study recommends the following:

- Retailers and service providers need to adopt a new strategy based on two basic pillars: providing new and distinct value to the consumer and constantly increasing production capacity.
- Companies need to develop effective marketing strategies and enhance their presence in the e-commerce sector.
- The importance of personalizing the consumer experience to ensure successful results.
- Achieve outstanding value for consumers and enhance its ability to develop a strong e-commerce strategy

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