

Effect of Corona Virus on the Shopping Criteria of Lebanese Consumers

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Summary: *The negative consequences of Covid-19 pandemic from lockdowns of whole countries, travel bans, and the closure of shops and service points have disrupted the economic and social balance of the whole world. Consequently, consumer's buying behavior and their shopping criteria has been negatively affected. In this research paper we try to find out the changes in habits and attitudes and their effect on the consumption patterns. To do so, we conducted a survey consisting of 33 questions used to ask more than 400 Lebanese consumers about the effect of Covid-19 on their shopping criteria. The main research Question of this study is to ascertain the impact of Covid-19 on Consumers shopping criteria? The results indicate that the consumers shopping criteria is negatively affected by the spread of the coronavirus and the price sensitivity was the most important variable influencing the consumers shopping criteria as consumers are buying cheaper commodities. Also, consumers tend to buy healthier products. On other hand, consumers are not ordering online for many reasons.*

Keywords: *COVID-19, Pandemic, Consumer habits, New regulations for shopping, Customer experience, Shopping criteria.*

I. Introduction

Throughout the course of history, a series of crises generated by pandemics, wars, cataclysms and other natural phenomena, have led to the occurrence of severe economic disturbances, materialized in deep changes of the society. In the last century, the global human history has registered thousands of epidemics, including diseases from the Spanish flu, to the Asian flu, passing by AIDS pandemic and epidemic, H1N1 Swine Flu, Ebola, Zika Virus epidemic and ultimately the Covid 19 Corona virus global pandemic (Jarus, 2020).

The initial appearance of COVID-19 in China and its fast worldwide spread during 2020 has changed the lives of billions of people. During this crisis, the majority of countries have imposed international travel bans, lockdowns of whole countries and the closure of the majority of shops and other service points. Consequently, health care systems were suffering from the large patient load and its ability to face the spread of such pandemic has been questioned (Faust, 2020).

Even worse, the COVID-19 has not only risked global humanity health but also the social and economic stability in each affected country, and has tested its resilience to face such pandemic. As such, leading economic experts recognize the major effect of COVID-19 on both consumption and GDP (Borsh, 2020; Stanciu *et al.*, 2020; Wirtschaftsdienst, 2020) and some other experts predict the largest economic recession since the great depression with a worldwide impact (Rappeport and Smialek, 2020).

In another hand, consumers are deeply concerned about the impact of COVID-19 on their health and their consumption behavior. People across the globe are afraid as they strive to adapt to a new normal. Consequently, they are responding in a variety of ways and have differing attitudes, behaviors and purchasing habits (Wright and Blackburn, 2020). To overcome such situation companies are implementing new sales and service solutions to secure minimum level of business, some of the adaptation methods involve ecommerce, digital customer service, etc. without a doubt the COVID-19 epidemic is one of the greatest crises for the humanity within the past decade and will influences consumer behavior (Zierlein *et al.*, 2020).

The purpose of this research paper is to examine the impact of Covid-19 pandemic on consumer shopping criteria. Are the consumers changing their consumption habits due to lockdown and social distancing especially by buying cheaper commodities with different shopping criteria? Are the consumers acquiring new habits as ordering online and buying healthy food?

II. Literature review

According to the World Health Organization, COVID-19 is the infectious disease caused by the most recently discovered coronavirus. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019. COVID-19 pandemic is a global health crisis, being spread subsequently to Europe, Euro-Asia and America (Mayo Clinics, 2020; Hui et al., 2020). At the present, there are over 13 million persons affected and more than 580 thousand deaths worldwide, while in Lebanon, there are 2419 confirmed cases and 36 deaths. These numbers are continuously increasing and the information on the discovery of a medical treatment with concrete results or the development of a vaccine are not encouraging (Corbu, 2020). The general recommended measures by the WHO are strict personal hygiene, avoiding contact with persons susceptible of infection, isolation, quarantine and most recently, wearing protection masks in public spaces (WHO, 2020a).

The spread of the global coronavirus epidemic has had a strong impact on financial markets, with important effects on the world economy as the majority of the infected countries have taken drastic measures to limit the spread of infection by stopping any economic activity and closing border, which affected badly several sectors of activity such as tourism, retail, transport, agriculture (Stephany *et al.*, 2020).

Regarding the changing attitudes, behaviors and habits of consumers due to COVID-19 outbreak, many studies and researches on same has emerged to try to understand these changes. For example, The Accenture Covid-19 Consumer Research run regular surveys to track changes in the situation, last one was conducted during April 2–6 and included 3,074 Covid-19 consumers in 15 markets around the globe (Wright and Blackburn, 2020).

According to their findings there are five new types of consumers: the worriers, who are, in majority, senior citizens fearful of the future, anxious and worried about their health. The second type of consumers are the individualists, who looks out for themselves, stockpiling essentials and trying to ensure he or she can maintain his or her status quo. The third type of consumers are the rationalist. This person has a “keep calm and carry on” mentality. They have a high awareness of news sorting information into what is useful vs. what is not. they have increased the purchase of only advised products, such as personal hygiene, cleaning and staple products. While the fourth type of consumers is the Activist who is looking out for and supporting others in the community. Finally, the nonchalant person who is carrying out business as usual, they call him the Indifferent. He or she is the least informed of all consumer types and is unlikely to be aware of, or comply with, the government’s advice.

Moreover, they found out that 34% of consumers are increasing their purchase of personal hygiene products while cutting back on more discretionary categories. Consumer priorities have become centered on the most basic needs, sending the demand for hygiene, cleaning and staples products soaring, while nonessential categories slump. The factors that influence brand decisions are also changing as a “buy local” trend accelerates. Digital commerce has also seen a boost as new consumers migrate online for grocery shopping—a rise that is likely to sustain post-outbreak. While the social impact of the outbreak of The COVID-19 has slowed the pace and changed the daily life of many consumers, and this is having a profound impact on how we engage with our communities, friends and families. People are embracing technology more than ever to support all aspects and consequences of isolation. There is also positive evidence to suggest that this crisis will build communities, rather than separate them (Wright and Blackburn, 2020).

On the other hand, Monitor Deloitte in their survey, sheds light on how German consumers are expecting their behaviors to change during and after the COVID-19 crisis. More than 2,000 participants took part in the conducted survey during April 2020. In their study Deloitte covered all major affected industries (retail, consumer goods, banking, telecommunication, etc.) in addition to provide detailed behavioral insights regarding different demographical levers. The results show that the crisis forces consumers to change their habits and ways of living in aspects like travel, shopping, sports and meet-ups with friends and that shift toward digital content and that these forced shift in consumption will have long term effect on consumer behavior. The results also shown a differentiation by demographics. While households with a lower income do not show major changes in habits during this crisis, households with a higher income demonstrate bigger shifts in behavior. Furthermore, respondent ages show a big effect in the survey results. Younger people who are forced to miss social interaction and activities due to forced lockdown are more likely to go back to old habits of shopping, eating outside and travelling. In contrast, senior citizens will return to their old habits only when the risk of infection is mostly eliminated. The study also showed that the lockdown of countries due to COVID-19 has led to changes in consumer behavior. And the driver for all these changes is security concerns (Zierlein *et al.*, 2020).

As per the shopping behavior and according to (Sheth, 2020) all consumption is location and time bound. Consumers develop habits over time about what, when and where to consume. According to the author there are four major contexts which govern or disrupt consumer habits. The first one, is related to the change in the social context as getting married, having children and moving from one city to another or moving to another country. The second context is the breakthrough of technology. The use of smart phones, and internet. Online search and online ordering through the use of different ecommerce platforms have dramatically impacted the way consumers shop and buy products and services. A third context that impacts consumption habits are the rules and regulations issued by the government related to the non-consumption of unhealthy products such as smoking and alcohol. In other policymakers can encourage consumption of societally good products and services such as solar energy, electric cars, and mandatory auto and home insurance services and vaccines for children. The fourth and less predictable context are the unpredicted natural disasters such as earthquakes, hurricanes, the break out of wars and regional conflicts and the outbreak of global pandemics including the Covid-19 pandemic we are experiencing today.

In his research paper Sheth, 2020 also found out that there are eight immediate effects of Covid-19 pandemic on consumption and consumer behavior. Consumers are stockpiling essential products for daily consumption resulting in temporary stock outs and shortages this includes toilet paper, bread, water, meat, disinfecting and cleaning products. The coronavirus also unleashed the creativity and resilience of consumers for tradition bound activities as weddings and funeral services. Moreover, because of the outbreak of the virus consumers try to postpone the purchase and consumption of discretionary products or services, such as buying automobiles, homes, and appliances. Also attending concerts, sports events going to bars, and restaurants is avoided. This phenomenon results in the shift of demand is called Pent up demand. Furthermore, consumers are embracing digital technology more than ever as they have adopted several new technologies and their applications as the use of Zoom video services for video conference work meetings and remote classes at home for schools and colleges. The use also social media applications are also at its peak. Stores comes home is another phenomenon caused by the complete lockdown of countries, consequently consumers in confinement are ordering grocery stores products to their homes so does work and education. Also the author finds out that there is blurring of boundaries between work and home and between tasks and chats. Some sort of schedule, planning and compartmentalization are necessary to make home more efficient and effective. Other virus impact is on the reunions with friends and family, which are happening through social media such as Zoom and WhatsApp. Finally, consumers are becoming content generator and start to discover and share their talent and creativity through the use of YouTube and tiktok platforms.

Due to imposed lockdowns, retail and online businesses have had to rapidly shift to enhance their digital services and strengthen their e-commerce solutions, in order to continue to serve customers. The companies that already had a strong online presence, have used this time to improve and grow. Companies that do not need to come into physical contact with customers are growing in popularity across the globe. The winners in this category are the remote work service providers, such as Zoom and Microsoft Teams, streaming services, such as Netflix, logistics providers, and grocery / foodstuff sellers.

However, advertising revenues will drop, due to weakened demand. The drop is advertising, even from the world's biggest brands, such as Coca Cola, will have a grave impact on advertising agencies, the media and production houses. with the COVID-19 crisis, struggling businesses, especially the small ones which constitute 95% of companies in Lebanon according to UNDP, had to adapt and find a solution or close down. Hence, the demand for ecommerce solutions skyrocketed.

During the month of April, 2020, a whopping 6,120 users searched for an ecommerce solution in Lebanon. That's a huge rise from the modest 3,300 recorded just 5 months ago. And so, with the rise on demand, Lebanese digital agencies started to come up with solutions to meet this new need business owner had. (Antoun, 2020)

The changing consumer's behavior thus requires adapting company strategies and identifying new ways to reach to the customer (OECD, 2020). For example, there is a growing demand for long-life food products at the expense of perishable food products in some countries (FAO, 2020a). This leads, according to FAO, to major losses for farmers both in terms of perishability and storage, added to labor shortages (FAO, 2020b).

III. Methodology

In this explanatory study, the ontological position is objectivism as the study exists in reality and it is external to human social factors. Also the epistemology is applied because it is related to the acceptable

knowledge in the study field. From the other side the positivism philosophy is used, where the author developed hypotheses which will be either accepted or rejected depending on the findings of the research.

Regarding the approach, it is deductive; it started from theory to specific and tested different hypotheses. And the research method is the mono-method quantitative, because the author conducted a questionnaire consisting of 33 questions used to ask respondents about the effect of Covid-19 on their shopping criteria. Also the survey strategy is used, as we collected quantitative data using a questionnaire and analyze it quantitatively, using the SPSS software depending on different tests; factor analysis, reliability test, correlation and regression analysis.

The population represents the Lebanese consumers (403 respondents). Sampling technique used is the non-probability, convenience random sampling. The author selected respondents that are easiest to obtain and are willing to participate. Additionally, it requires continuing the sample selection process until getting the needed sample size. Based on Saunders research method, the sample size with 5% margin of error is at least 384 respondents, thus in this study the sample size is acceptable with 403 respondents.

In this research we study the relationship between different variables related to the consumer shopping behavior and its attitudes affected by Covid-19 pandemic; from one hand, we considered the shopping criteria as a dependent variable; and from another hand buying healthy food, online shopping and price changes are considered as independent variables. As for the moderator variables, we considered the demographic factors, corona changing shopping behavior these variables.

The main research Question of this study: what is the impact of Covid-19 on Consumers shopping criteria?

As for the Research hypothesis, we expect to confirm the following statements:

H1: There is a positive relationship between price sensitivity and shopping criteria during Covid-19 pandemic

H2: There is a positive relationship between buying healthy food and the shopping criteria during Covid-19 pandemic

H3: There is a positive relationship between shopping online and shopping criteria during Covid-19 pandemic

IV. Results and discussion

The findings supported the researcher to deeply understand the variables relation and to reach a well-defined conclusion about the research study. The data analysis is significant in this paper because it was based on a statistical treatment for variables starting with the Cronbach alpha and using correlation and regression tests.

4.1 Factor Analysis

Factor analysis is an explanatory technique used to define the structure among the variable of the study. Since the KMO is (0.765) which is greater than 0.6, and it is significant ($0.000 < 0.005$), then it means that the researcher can conduct the reliability test and the correlation and regression analysis.

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.765
	Approx. Chi-Square	2295.840
Bartlett's Test of Sphericity	Df	253
	Sig.	0.000

Source: Own elaboration

4.2 Reliability test

To ensure the validity and reliability of this thesis, the Cronbach's alpha test is used. First of all the validity concept was defined by Tavakol & Dennick in 2011 as; "the extent to which an instrument measure what it is intended to" whereas the reliability is the ability of an instrument to measure consistently (Tavakol, M. & Dennick, R., 2011). The result of the Cronbach's alpha is essential for evaluating the validity and the reliability of the research questionnaire, knowing that it is applied to the Likert scale type of questions.

The Cronbach alpha reliability normally ranges between 0 and 1. The more the result of the Cronbach alpha is closer to 1, it indicates a very good internal consistency of the items in the scale and it ensures that the study is valid and reliable.

In this thesis, the Cronbach alpha is 0.795 as shown in the below table, which is a very good result and illustrates that the variables are valid and reliable results.

Table 2. Reliability Statistics

Cronbach's Alpha	N of Items
0.795	27

Source: Own elaboration

4.3. Descriptive Statistics

The first set of questions in the questionnaire are related to the demographic factors of respondents, which represent their age, gender, income, and marital status, the number of children, education, and occupation. The respondents' demographic factors, are summarized in the below table, and aims to summarize the sample demographic factors and to show the differences in each factor.

Table 3. Demographic Characteristics of participants

Age Distribution	Frequency	Percent	Cumulative percent
18-24 years	145	36.0	36.0
25-34 years	110	27.3	63.3
35-44 years	90	22.3	85.6
45-64 years	43	10.7	96.3
65 years and above	10	2.5	98.8
Less than 18	5	1.2	100
Gender	Frequency	Percentage	Cumulative percentage
Female	248	61.5	61.5
Male	155	38.5	100
Marital status	Frequency	Percentage	Cumulative percentage
Divorced	21	5.2	5.2
Married	139	34.5	39.7
Single	233	57.8	97.5
Widowed	10	2.5	100.0
Occupation	Frequency	Percentage	Cumulative percentage
Housewife	34	8.4	8.4
Private Employee	134	33.3	41.9
Public Employee	59	14.6	56.6
Retired	18	4.5	61.0
Self-employed	47	11.7	72.7
Student	72	17.9	90.6
Unemployed	38	9.4	100.0
Monthly Income	Frequency	Percentage	Cumulative percentage
1,000,000-1,999,000	33	8.2	8.2
2,000,000-2,999,000	115	28.5	36.7
3,000,000-3,999,000	66	16.4	53.1
4,000,000- 4,999,0000	45	11.2	64.3
5,000,000 - 5,999,000	21	5.2	69.5
500,000– 999,000	5	1.2	70.7
Less than 499,000	71	17.6	88.3
More than 6,000,000	25	6.2	94.5
	22	5.5	100.0

Educational level	Frequency	Percentage	Cumulative percentage
Master's degree	75	18.6	18.96
Intermediate school	18	4.5	23.1
PhD degree	34	8.4	31.55
Primary Education	6	1.5	33.0
Secondary Education	47	311.7	44.7
Technical School	31	7.7	52.4
University/Technological Institution	192	47.6	100.0

Geographic Location	Frequency	Percentage	Cumulative percentage
Akkar	7	1.7	2.0
Baalback-Hermel	8	2.0	4.0
Beirut	73	18.1	22.1
Beqaa	17	4.2	26.3
Mount Lebanon	265	65.8	92.1
Nabatieh	4	1.0	93.1
North	9	2.2	95.3
South	19	4.7	100.0

Does the Corona Virus issue cause any changes in your buying behavior?	Frequency	Percentage	Cumulative percentage
Maybe	55	13.6	13.6
No	26	6.5	20.1
Yes	322	79.9	100.0

Source: Own elaboration

4.4. Correlation matrix

This section represents the correlation matrix between all variables of this research paper. The correlation matrix highlighted on the significance of the variables (probability value) and the correlation that as it increases the relationship between variables increases.

When the relationship is significant (<0.05) that means there is a positive and strong relationship and the variables affect each other positively. And when it is negative, it implies that there no significant relationships between variables and they don't influence each other.

As shown in the below table, a relationship exists between the variables price sensitivity and online shopping (0.141), price sensitivity and shopping criteria (0.173), healthy food and online shopping (0.213), healthy food and shopping criteria (0.390), shopping criteria and online shopping (0.129).

Table 4. Correlations between variables

		Price sensitivity	Online shopping	Shopping criteria	Healthy Food
Price sensitivity	Pearson Correlation	1	0.141**	0.173**	0.095
	Sig. (2-tailed)		0.005	0.001	0.059
	N	397	396	393	394
Online shopping	Pearson Correlation	0.141**	1	0.129*	0.213**
	Sig. (2-tailed)	0.005		0.010	0.000
	N	396	400	394	396
Shopping criteria	Pearson Correlation	0.173**	0.129*	1	0.390**
	Sig. (2-tailed)	0.001	0.010		0.000
	N	393	394	395	392
Healthy Food	Pearson Correlation	0.095	.213**	0.390**	1
	Sig. (2-tailed)	0.059	0.000	0.000	
	N	394	396	392	397

Source: Own elaboration

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

* . Correlation is significant at the 0.05 level (2-tailed).

4.5. Regression analysis

After testing the correlation between the main variables, a multiple simple regression analysis is used to examine the relationship between the dependent and the independent variables. The regression analysis is an added value for its prediction capabilities. The table below represents the prediction for the dependent and independent variables.

Table 5. ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	14.366	3	4.789	26.971	.000 ^b
1 Residual	68.354	385	.178		
Total	82.720	388			

a. Dependent Variable: Shopping_criteria

b. Predictors: (Constant), Healthy_Food, Price, Online

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.872	.130		14.392	.000
1 Price	.126	.045	.132	2.819	.005
Online	.017	.025	.032	.676	.500
Healthy_Food	.269	.034	.373	7.847	.000

Source: Own elaboration

a. Dependent Variable: Shopping_criteria

From the mentioned tables the multiple regression model between the variables is significant (0.00) in the Anova table. Secondly the Adjusted R square is used to measure the proportion of the variation in the dependent variable Shopping criteria explained by the independent variables price and healthy food which resulted significant, while the online variable is not significant (0.5).

The multiple regression formula for the variables is:

Equation 1: Multiple regression model for the variables shopping criteria, price, and healthy food

Shopping criteria = 1.872 + 0.126 Price + 0.269 Healthy food

This formula is used to predict the criterion or the dependent variable using the regression as a prediction method. An increase of Price by 1 unit will increase the Shopping criteria by 0.126 units. Also an increase of Healthy food by 1 unit will increase the Shopping criteria by 0.269 units.

➤ **Multiple regression with the moderator variables.**

After making and analyzing the multiple regression model based on the dependent variable (Shopping criteria) and the independent variables (price, online, and healthy food), it is necessary to test the moderator variables of

the study; age, gender, marital status, occupation, education, income, geographic location, behavior. Testing the moderator variable was done based on the stepwise multiple regression method, which enable the researcher to automatically predict the significant factors and exclude the non-significant ones.

Table 6. ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.761	1	12.761	70.594	.000 ^b
	Residual	69.959	387	.181		
	Total	82.720	388			
2	Regression	14.465	2	7.232	40.901	.000 ^c
	Residual	68.255	386	.177		
	Total	82.720	388			
3	Regression	16.226	3	5.409	31.316	.000 ^d
	Residual	66.494	385	.173		
	Total	82.720	388			
4	Regression	17.091	4	4.273	25.001	.000 ^e
	Residual	65.629	384	.171		
	Total	82.720	388			
5	Regression	17.822	5	3.564	21.036	.000 ^f
	Residual	64.898	383	.169		
	Total	82.720	388			
6	Regression	18.590	6	3.098	18.456	.000 ^g
	Residual	64.130	382	.168		
	Total	82.720	388			
7	Regression	19.310	7	2.759	16.575	.000 ^h
	Residual	63.410	381	.166		
	Total	82.720	388			

a. Dependent Variable: Shopping_criteria

b. Predictors: (Constant), Healthy_Food

c. Predictors: (Constant), Healthy_Food, yes

d. Predictors: (Constant), Healthy_Food, yes, Price

e. Predictors: (Constant), Healthy_Food, yes, Price, Unemployed

f. Predictors: (Constant), Healthy_Food, yes, Price, Unemployed, Self_Employed

g. Predictors: (Constant), Healthy_Food, yes, Price, Unemployed, Self_Employed, Technical_School

h. Predictors: (Constant), Healthy_Food, yes, Price, Unemployed, Self_Employed, Technical_School, Primary_Education

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.155	.090		23.901	.000
	Healthy_Food	.283	.034	.393	8.402	.000
2	(Constant)	2.024	.099		20.525	.000
	Healthy_Food	.283	.033	.392	8.479	.000
	Yes	.165	.053	.143	3.104	.002
3	(Constant)	1.720	.136		12.617	.000
	Healthy_Food	.272	.033	.378	8.222	.000
	Yes	.177	.053	.154	3.352	.001
	Price	.140	.044	.147	3.193	.002
4	(Constant)	1.706	.136		12.572	.000
	Healthy_Food	.279	.033	.386	8.428	.000
	Yes	.180	.052	.156	3.422	.001
	Price	.131	.044	.137	2.990	.003
	Unemployed	.160	.071	.103	2.250	.025
5	(Constant)	1.673	.136		12.298	.000
	Healthy_Food	.273	.033	.379	8.282	.000
	Yes	.195	.053	.170	3.701	.000

	Price	.138	.044	.145	3.151	.002
	Unemployed	.177	.071	.114	2.481	.014
	Self_Employed	.137	.066	.096	2.077	.038
6	(Constant)	1.658	.136		12.226	.000
	Healthy_Food	.285	.033	.395	8.554	.000
	Yes	.181	.053	.158	3.424	.001
	Price	.142	.044	.149	3.249	.001
	Unemployed	.184	.071	.118	2.589	.010
	Self_Employed	.148	.066	.104	2.247	.025
	Technical_School	-.169	.079	-.099	-2.138	.033
	(Constant)	1.669	.135		12.349	.000
7	Healthy_Food	.284	.033	.394	8.565	.000
	Yes	.175	.053	.152	3.320	.001
	Price	.137	.044	.144	3.153	.002
	Unemployed	.191	.071	.123	2.693	.007
	Self_Employed	.153	.066	.107	2.333	.020
	Technical_School	-.164	.079	-.096	-2.087	.038
	Primary_Education	.351	.169	.094	2.080	.038
	a. Dependent Variable: Shopping_criteria					

Source: Own elaboration

Based on the above tables the multiple regression model between the variables is significant (0.00) as shown in the Anova table. In which we added all the moderator variables and the software automatically excluded many of them, that are not significant

The multiple regression formula for the moderator variables is:

Equation 1: Multiple regression model for the variables shopping criteria, price, and healthy food

$$\text{Shopping criteria} = 1.669 + (0.284 \text{ Healthy food}) + (0.175 \text{ corona change behavior}) + (0.137 \text{ Price}) + (0.191 \text{ Unemployed}) + (0.153 \text{ Self-employed}) - (0.164 \text{ Technical School}) + (0.351 \text{ Primary Education})$$

The formula concluded that an increase of healthy food by 1 unit will increase the Shopping criteria by 0.284 units. Also an increase of change behavior after Corona Virus outbreak by 1 unit will increase the Shopping criteria by 0.175 units. And an increase of price by 1 unit will increase the shopping criteria by 0.137 units. Moreover, the employment has a direct effect on consumers shopping criteria because every 1-unit increase with unemployment will increase the shopping criteria by 0.191, and a unit increase by self-employed will increase the shopping criteria by 0.153 units. In addition, the education has an impact on shopping criteria, since as technical school increases by 1 unit, the shopping criteria decreases by 0.164 units, and as primary school increases by a unit the shopping criteria increases by 0.351 units.

From the other side, some demographic factors were excluded because according to the results they don't affect the shopping criteria such as the marital status, age, gender, income and the geographic location.

V. Conclusions and recommendations

This paper aimed to examine the impact of Covid-19 pandemic on consumer shopping criteria. The study has been conducted using non-probability samples from the populations to provide glaring pictures on factors that impacted Consumers shopping criteria during the pandemic. Prevalence of coronavirus was measured with cumulative cases, new cases, and deaths, and this obliged the Lebanese government to announce the lockdown of the country starting from March 13, 2020. This has affected consumers lives, behavior, and shopping criteria.

The results indicate that the consumers shopping criteria is affected by the spread of the coronavirus and the independent variable (price sensitivity) was the most important variable influencing the consumers shopping criteria. This variable is related to shopping criteria with significant relationship as shown in the correlation test and the regression analysis. The reason behind is that the Lebanese economic recession has affected negatively most individuals lives, due to increasing pricing, close businesses and reducing staff. So more and more consumers are losing their purchasing power and they are searching for commodities with cheaper prices. Thus,

the first hypothesis is accepted, as there is a positive relationship between price sensitivity and shopping criteria during Covid-19 pandemic.

From the other side, due to Covid-19, consumers tend to buy healthier products, and this was confirmed in the correlation and regression analysis of this study. Healthy products will improve consumer's immunity system, mainly during quarantine and staying at home. In such cases, consumers may shift their shopping behavior; they have to eat at home and they have time to dine at home as well. So the second hypothesis "there is a strong relationship between healthy food and shopping criteria" is accepted as well.

Regarding the third hypothesis, "There is a positive relationship between shopping online and shopping criteria during Covid-19 outbreak or pandemic" it is rejected. Because, the results revealed that there is no relationship between online and shopping criteria of Lebanese consumers. Even though consumers are at home and they have to buy online, but they are struggling to do that because they lack the trust in online shopping and due to low internet connection and speed, and electricity problems in Lebanon.

Finally, Lebanese consumers are changing their consumption habits due to lockdown and social distancing especially by buying cheaper commodities with different shopping criteria. Consumers are not ordering online and they are buying healthy food.

As for the recommendations: from the outcomes of the study we recommend investigating the factors that affect the negative relationship between online shopping and shopping criteria during the pandemic. Thus retailers need to be more focused on business strategy and invest in low cost healthy products. Also, it is recommended to grasp the opportunity to study the impact of the Covid-19 on their business strategies. As for the consumer consumption behavior it is recommended to study in the future if consumers will permanently change their consumption habits due to Covid-19 outbreak or will they go back to their old habits once the crisis is over.

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