

DOI: [10.21608/alexja.2024.255216.1055](https://doi.org/10.21608/alexja.2024.255216.1055)

Impact of the Outbreak of the COVID- 19 Virus on Online Compulsive Buying Obsession in Alexandria Governorate

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ABSTRACT

In conjunction with the COVID-19 pandemic, consumer purchasing behavior has been greatly affected and prompted many consumers to turn to electronic commerce causing purchasing obsession to sector of them, or what is known to some as compulsive buying. This research aims to determine the impact of the COVID-19 virus on online compulsive buying obsession. The data was collected by online questionnaire by accident to a sample of 155 consumers. The results showed a positive correlation with statistical significance at 0.01 between each of online purchasing practices, motivations in general, price motives, effort motives, personal motives, and product motives with compulsive buying obsession. There were also significant differences at the probability level of 0.01 between each of the average levels of online purchasing practices and the average levels of motivation according to the level of compulsive buying obsession. Also, there was a significant difference in the change in both online purchasing practices and motivations before and after the COVID-19 pandemic at the probability level of 0.05 and the differences were in favor after the pandemic. Additionally, a significant impact of both online purchasing practices and motivation levels after the COVID-19 pandemic on compulsive buying obsession at the probability level of 0.01.

ARTICLE INFO

Article History

Received: 13/12/2023

Revised: 19/1/2024

Accepted: 16/1/2024

Key words: Compulsive buying obsession; Purchasing obsession; Consumer behavior; COVID-19

INTRODUCTION

COVID-19 pandemic is more than a simple health crisis. As it was considered as a human crisis which was declared as pandemic by WHO on march 11, 2020. Societies are attacked by this crisis at core level. Mortality rate has been proven to be extremely high in this COVID19 disease, (Celik *et al.*, 2020).

COVID-19 has already caused widespread damage to the global economy, with few countries shutting down their stock markets, closing corporate offices, retiring small businesses, and canceling major social events. The additional effects of reduced consumption and investment have impacted many other areas dependent upon healthy economies, (Ozili *et al.*, 2020). The pandemic has negatively affected consumption across several market categories in China, (Chen *et al.*, 2020). In Great Britain, economic spending has been largely redirected toward necessities, such as groceries, (Chronopoulos *et al.*, 2020). In Denmark, product and service market consumption has dropped by 27%, (Andersen *et al.*, 2020) with economic spending being largely redirected toward personal protective equipment, (Addo *et al.*, 2020). In Romania, people have changed their daily activities and economic habits, forcing companies to adapt and reassess their strategies. In return, online shopping has grown substantially with consumers exercising caution while sequestering at home. Notably, restaurants and retail outlets have suffered the most (Baker *et al.*, 2020). Luxury and high-end

retailers are also suffering, leading to narrower selections of value-oriented brands and specials, (Roggeveen and Sethuraman, 2020). On the other hand, several versatile brands have adapted quickly and are showing new signs of growth during this time, (Knowles *et al.*, 2020).

Consumer behavior is a field of research that has its roots in sciences such as psychology, sociology, sociology psychology, humanities, and economics. Understanding consumer behavior will provide the foundation for marketing strategies, such as product prediction, market segmentation, new product development, new market applications, global marketing, and marketing mix, these major marketing activities will be more effective when based on an understanding of consumer behavior, (Nguyen Hoang Tien *et al.*, 2021).

In conjunction with the COVID-19 pandemic, consumer purchasing behavior has been greatly affected. The precautionary measures taken were an important factor in limiting the spread of the pandemic. COVID-19, which prompted many consumers to turn to electronic commerce compared to the previous situation. The most prominent factors that helped the consumer to shop electronically with the COVID-19 pandemic are home quarantine and concern about scarcity of products, (Stanciu *et al.*, 2020).

In a study conducted by the United Nations Conference on Trade and Development (UNCTAD), it was stated that the COVID-19 epidemic changed the way consumers shop online forever. The study,

with nearly 3,700 consumers in nine countries, examined how the global crisis affected the way people use e-commerce and other digital tools, (Unnews, 2020).

Concern over the scarcity of some basic products has led to product hoarding behavior for fear of not being available at a later time. The most in-demand products during the COVID-19 pandemic were gloves, masks, disinfectants, citrus fruits, home group games, sterilizers, (Trade and Retail Association, 2020).

This requires any country affected by COVID-19 to impose certain health and security measures, and home quarantine, partially or completely, which results in the occurrence of a type of Panic, fear, and anxiety, especially psychologically, which force some people to carry out certain behaviors and actions that express fear in what is called purchasing obsession, (Georgiana *et al.*, 2015).

Purchasing obsession, or what is known to some as compulsive buying or shopping addiction, is considered A psychological behavior and behavior that characterizes an individual, which is demonstrated by his doing something Behind the continuous and uncontrolled release of products. It is a behavior that any individual in a society may engage in as a result of some events and developments. Which may occur to the individual or society, which somewhat explains these purchasing behaviors as it is the fear and anxiety of the loss or absence of some possessions or the rise in their price, (Georgiana *et al.*, 2015).

There are several definitions of compulsive buying, perhaps the most prominent of which is Edward's has been defined as a form of Unnatural shopping and spending as the consumer suffers from compulsive desire and pleasure. Frequent shopping and spending that cannot be controlled, and it may be concluded as a way to reduce negative feelings such as stress and anxiety, (Gamila, 2015). It is a type of inappropriate consumer behavior that is usually excessive and clearly annoying. to the lives of individuals who seem recklessly driven to consume, (Georgiana *et al.*, 2015).

A compulsive buyer often feels happy or powerful when shopping. This was usually followed by feelings of disappointment and guilt about some of the purchasing behaviors that he carried out. This purchase has appeared repeatedly in several periods accompanying some crises, such as Katrina hurricane occurred in 2005 and reappeared with the outbreak of COVID-19 epidemic, which prompted people to quickly head to stores and shops, buy everything they can buy and accumulate it in their homes, which is called Scientifically panic buying, which the reason for its occurrence, or rather the motivation of individuals to carry out this behavior, is due to enhancing the feeling of safety taking into consideration the circumstances and the feeling of

loss of control in daily life, the accumulation of purchases in front of their peers makes them feel safety and control. In addition, misimpression of scarcity of goods by catching some people catching the moments when a certain product runs out and before the employees fill the shelves. This creates a strong incentive for people to buy more than necessary, just as some people pay Those who benefit from crises resort even to informal methods and at double their prices, (Hakim B. and Abdeljalil T.:2021).

From all the above, overall, new consumer habits especially online shopping preferences that started with the pandemic process are expected to become permanent with the prolongation of the process. For this reason, the product groups that consumers buy, the methods they use and the points of purchase may change from the store environment to the online environment. In order to make such prediction, the process should be permanent for a long time, and consumers should make these behaviors a habit. Hence the research problem arises which is represented by the fear of the phenomenon of buying mania among consumers as a result of the emergence of this pandemic.

RESEARCH OBJECTIVES

The main objective of this research is to determine impact of COVID-19 virus on online compulsive buying obsession.

This goal can be achieved through the following sub-goals:

- 1- Studying the social and economic characteristics of the research sample.
- 2- Evaluating the research sample's opinions in general towards online purchasing during COVID-19 pandemic.
- 3-Measuring the research sample's practices towards online purchasing before and after the COVID-19 pandemic.
- 4-Measuring the research sample's motives for online purchasing before and after the COVID-19 pandemic.
- 5-Evaluating compulsive buying obsession behavior scale for the research sample.
- 6- Studying the correlational relationships between independent and dependent factors.
- 7-Studying the difference between the change in online purchasing practices and motivations for the research sample before and after COVID-19 pandemic.
- 8-Studying the impact of online purchasing practices and motivations for the research sample after COVID-19 pandemic on compulsive buying obsession.

Research importance

The study derives its importance from the fact that it sheds light on one of the most important behaviors that may affect individual and the family,

especially in light of the spread of this crisis, which could be repeated or similar to it at any time. In addition to the above, the study also presents some procedural concepts for the study variables represented in the buying obsession, while understanding the steps that individuals go through and the factors influencing their purchasing behaviors before and after the emergence of this pandemic.

MATERIALS AND METHODS

1. Research terms and operational definitions:

Compulsive buying: a form of Unnatural shopping and spending as the consumer suffers from compulsive desire and pleasure. Frequent shopping and spending that cannot be controlled, and it may be concluded as a way to reduce negative feelings such as stress and anxiety, (Gamila, 2015). It is a type of inappropriate consumer behavior that is usually excessive and clearly annoying, to the lives of individuals who seem recklessly driven to consume, (Georgiana *et al.*, 2015).

Compulsive buying obsession: This is the lack of advance planning for the purchasing process. As well as the absence of intention to resist consumer offers, in addition to repeated un organized and unwanted purchasing behaviors, (Mahmoud saleh, 2012).

1-It is intended in this research by the set of behaviors practiced by the consumer in light of the COVID-19 pandemic and the subsequent feelings that follow, and was calculated according to compulsive buying obsession scale, it was divided into low, medium, and high obsession.

Purchasing behavior: A group of activities and behaviors that the consumer performs while searching for goods and services he needs in order to satisfy his needs and desires, (Madaa Elyassin, 2017).

2-The researcher adopted this scientific term in this research.

Purchasing motivations: The consumer makes a purchase after responding to external stimuli that motivate him to buy and acquisition of goods and services in order to achieve several motives or to achieve one motive among them, (Sima Maqatif and Raed elmomeny, 2011).

3-The researcher adopted this scientific term in this research.

2. Methodology:

The researcher used the descriptive analytical method, which depends on describing the phenomenon under study and analyzing its data.

3. Research variables:

The research variables were represented in three types of variables as follows: The independent variables: which were represented in the socio-economic characteristics of consumers under study, represented in (age in years– marital status-

educational qualifications- Occupation neighborhood- number of family members- average monthly family income - Sources of income-average personal expense).

1-The intermediate variables are represented in practices towards online purchasing after the COVID-19 pandemic and motives for purchasing online after the COVID-19 pandemic.

2-The dependent variables represented in compulsive buying obsession behavior.

4. Research hypotheses:

The hypotheses of the study were formulated in its zero form as follows:

-There is no significant correlation between the economic and social characteristics of the consumers under study as an independent variable, and both the online purchasing practices of consumers after the COVID-19 pandemic and the motivations for purchasing after the COVID-19 pandemic as intermediate variables and the compulsive buying obsession of consumers as a dependent variable.

-There is no significant correlation between both the online purchasing practices of consumers after the COVID-19 pandemic and the motivations for purchasing after the COVID-19 pandemic as intermediate variables and the compulsive buying obsession of consumers as a dependent variable.

-There are no significant differences between the average levels of both the online purchasing practices of consumers after the COVID-19 pandemic and the motivations for purchasing after the COVID-19 pandemic according to the level of compulsive buying obsession of consumers.

-There is no significant difference of the change in the online purchasing practices and the motivations for purchasing between before and after the COVID-19 pandemic.

-There is no significant impact of the online purchasing practices of consumers and the motivations for purchasing after the COVID-19 pandemic on compulsive buying obsession of consumers.

5. Sample study

First: comprehensive search: included all online consumers in Alexandria Governorate.

Second: an accident sample consisted of 155 consumers collected online through google form.

Time limits of the study: The study was done from November 2021 until March 2022.

6. Data collection tool: the current research adopted a quantitative approach using online questionnaire as a method for data collection to answer the research question and achieve the aim and objectives.

7. Questionnaire axes

1-The first axe: it included data on some socio-economic characteristics of consumers represented in (age in years– marital status- educational qualifications- Occupation neighborhood- number of family members- average monthly family income - Sources of income- average personal expense).

Convert descriptive data to quantitative data:

The categories of marital status, educational level, occupation, sources of income, type of residential neighborhood were distinguished with codes indicating their status according to the preference of the different levels for each of them whenever possible, while the mean, standard deviation, range were calculated for age, number of family members, average monthly income, and average Personal expenses, and the length of the categories were classified according to range, Table (1).

2-The second axe: it included 12 phrases about consumer opinions towards purchasing during the COVID-19 pandemic represented in Household consumption increased to increase my purchases as a result of the emergence of the COVID-19 virus- my current purchases exceed my purchases before the outbreak of the COVID-19 virus-news circulating in the press allowed me to review my purchasing decisions- seek the opinions of those close to you to make a purchasing decision for consumer goods- I bought during this period without prior planning.

Convert descriptive data to quantitative data:

To estimate the level of opinions of the consumers under study, numerical scores were set for the answers to the statements, for positive statements were set at three answers, the highest score was given to the correct answer, which is 3 degrees, and the lowest score was given to the wrong answer, which was one degree, and the opposite was given to the negative statements (8 statements). Two degrees were also given permanently to the middle answer, and accordingly, a classification was made for the level of consumer opinions under study for three categories according to range, Table (1).

3-The Third axe: included purchasing practices used for online purchasing before and during the COVID-19 pandemic represented in (Purchase rate- Who is making the purchase? - Type of products purchased online- payment method- Preferred channel for online purchasing).

Convert descriptive data to quantitative data:

To estimate the level of online purchasing practices, the calculation of purchase rate and number of frequencies of each of purchase person, and number of products purchased, number of payment method and number of channels used for

buying then a classification was made for the level of online purchasing practices for consumers under study for three categories according to range, Table (1).

4-The Fourth axe: included motivations towards online purchasing before and during the COVID-19 pandemic represented in (5 phrases about price motives – 7 phrases about effort motives- 9 phrases about personal motives- 7 phrases about product motives).

Convert descriptive data to quantitative data:

To estimate the motivations of the consumers under study, numerical scores were set, such that the highest score was 3 degrees for the answer “strongly agree” and the lowest score was 1 score for the answer “disagree.” Two degrees were also given permanently for the middle answer. Accordingly, the motives of the consumers under study were classified into three categories according to the calculation of the range, Table (1).

5-The fifth axe: included dimensions of the compulsive buying scale during the COVID-19 pandemic represented in (the first dimension: impulsiveness- the second dimension: compulsive behavior- the third dimension: the pleasure of buying- the fourth dimension: buying things that the individual does not need- the fifth dimension: negative feelings resulting from the purchase).

Convert descriptive data to quantitative data:

To estimate the level of compulsive behavior of the consumers under study, numerical scores were set for the answers to the statements (30 negative statements), which were limited to three answers, so that the highest score was given for the answer “no,” which is 3 degrees, and the lowest score for the answer was “yes,” which is 1 score. Two marks were also given permanently for the middle answer for the positive statements, and accordingly. The level of consumers under study was classified into three categories according to the range, Table (1).

8. Statistical analysis: Mixed methods of data analysis were performed. The SPSS program was used to determine percentages, frequency, arithmetic mean, standard deviation, simple correlation coefficient (Pearson-Spearman), analysis of variance test, multiple standard partial regression coefficient, and T-test.

RESULTS AND DISCUSSION

1. Results related to the socio-economic characteristics of the consumers

The research results shown in table (2) showed that the majority of the sample was single and married by 49% and 47.1% respectively, with age range between 35 and less than 45 years old by 35.5%. A percent of 70.3% have bachelor degree, still students and works in private sector job by 31.6% and 23.2% respectively.

Also, the results showed that 72.9% lives in the middle neighborhood, and about number of family members were from 4 to 5 persons by 63.9%.

As for family income, it was less than 7000 LE by 54.8% its source parents' job and extra work by 74.8% and 29.7% respectively. And the personal expense ranged from 1000 LE to less than 3000 LE by 40%.

2. Results related to the level of consumer opinions towards online purchasing during the COVID-19 pandemic

The research results shown in table (3) showed that the level of consumer opinions towards online purchasing during the COVID-19 pandemic was low by 46.5% and that shows the lack of awareness of consumers facing this pandemic for the first time and not having the full experience to face it.

3. Results related to online purchasing practices used before and during the COVID-19 pandemic

The research results shown in table (4) showed comparison between online purchasing practices

before and during COVID-19 pandemic, as for purchasing rate it did not show difference as it was, if necessary, by 60.6% before and 63.2% during pandemic. And for the person who is responsible for purchasing also did not show difference as it was female children by 47.1% before and 49% during, then both parents by 33.5%.

While it showed difference in type of purchases, it was clothes by 68.4% before while it became 70.9% during. Also, food and restaurant services increased as it became during pandemic 56.1% and 46.4% respectively

About payment method the results showed that most of the sample pay cash on delivery by 91.6% before while it decreased to 88.4% during pandemic as 32.9% increases their way of payment by credit card. Facebook was the preferred channel to buy before and during pandemic by 61.3% and 70.9% respectively.

Table 1: Mean and standard deviation and category length for research variables

Axes	Minimum degree	Maximum degree	Range	Mean	Standard Deviation	Length of the categories
Age	19	52	33	30.8	8.7	< 25 25 - <35 35- <45 45 and more
Number of family members	2	7	5	4.2	1.1	2-3 4-5 6 and more
Average monthly income	1500	50000	48500	7837.4	7731.4	< 7000 LE 7000- < 14000 LE 14000 and more
Average Personal expenses	30	25000	24970	2857.3	4606.8	< 1000 LE 1000- < 3000 LE 3000 and more
Consumer opinions towards purchasing	21	32	11	25.4	2.8	Low (<25) Medium (25- <29) High (29 and more)
Online purchasing practices						Low (<9) Medium (9- 13) High (14 and more)
Before	4	18	14	9.4	2.9	Low (<11)
After	7	19	12	12.4	2.8	Medium (11- 14) High (15 and more)
Motivations						Weak (<45) Moderate (45- <64) Strong (64 and more)
Before	28	84	56	57.6	12.7	
After	28	84	56	61.4	13	
Compulsive buying	31	90	59	50.6	16.3	Low (<52) Medium (52- <72) High (72 and more)

Table 2: Distribution of the research sample according to the socio-economic characteristics' items

Socio-economic characteristics items	NO N=155	%	Socio-economic characteristics items	NO N=155	%
Age:			Marital status:		
< 25	45	29	Single	76	49
25 - <35	36	23.2	Married	73	47.1
35- <45	55	35.5	Divorced	6	3.9
45 and more	9	5.8			
Educational qualification:			Occupation:		
Middle	6	3.9	Student	49	31.6
Above average	3	1.9	Housewife	27	17.4
Bachelor degree	109	70.3	Governmental job	28	18.1
Post graduate	37	23.9	Private sector job	36	23.2
			Free business	9	5.8
			Job seeker	6	3.9
Neighborhood:			No of family members:		
Popular	12	7.7	2-3	37	23.9
Middle	113	72.9	4-5	99	63.9
Fancy	30	19.4	6 and more	19	12.3
Family income:			Personal expense:		
< 7000 LE	85	54.8	< 1000 LE	51	32.9
7000- < 14000 LE	55	35.5	1000- < 3000 LE	62	40
14000 and more	12	7.74	3000 and more	39	25.2
Source of income:					
(N= frequency)					
Parents job	116	74.8			
Real estate	21	13.5			
Legacy	6	3.87			
Extra work	45	29.7			
Investment certificates	21	13.5			
Others (Monthly salary)	8	5.2			

Table 3: Distribution of the research sample according to the level of consumer opinions towards online purchasing during the COVID-19 pandemic

Level of consumer opinions	No N=155	%
Low (<25)	72	46.5
Medium (25- <29)	61	39.3
High (29 and more)	22	14.2

And according to the report of The Telegraph, the World Health Organization (WHO) recommended that people be more careful about the use of money, especially physical coins as they frequently change hands, in order to prevent the spread of bacteria and to control the latest Covid-19 outbreak. Stating that hands should be washed after contact with money, WHO suggested deliberately avoiding using cash when making payments, and warns about making payments using contactless technology, if possible. Contactless payments stand out with their being hygienic as well as being fast and safe, (Telegraph, 2020).

Consumer payments through online purchases in Saudi Arabia via Mada card 2020 During the month of March with high capacity of 15% in comparison with February 2019, (Trade and Retail Association:2020).

Also, search results showed by Alina Butu *et al.*, (2020) that by analyzing only, the answers received from persons choosing home delivery (before, during, and post crisis) the percentage of respondents who use cash payment was lower than card payments or bank transfers (Figure 13). This demonstrates that during the COVID-19 crisis, the population became aware that card payments or bank transfers can be safe preventive measures against the COVID-19 epidemic. And about 88% of the respondents have stated that they did not buy vegetables with direct delivery from producers before crisis, after that date the percentage of consumers who placed direct delivery orders has increased to 60%. Even more, approximately 81% of the respondents have chosen this option post crisis, and only one respondent does not prefer this system of delivery.

Table 4: distribution of the research sample according to the online purchasing practices used before and during the COVID-19 pandemic

Online Purchasing practices	Before		During	
	Corona pandemic		Corona pandemic	
	No (N=155)	%	No(N=155)	%
Purchasing rate:				
Never	37	23.9	15	9.7
If necessary	94	60.6	98	63.2
Weekly	-	-	21	13.5
Monthly	15	9.7	15	9.7
Every 6 months	9	5.8	6	3.9
Who purchase: (N=frequency)				
Father only	15	9.7	7	4.5
Mother only	21	13.5	41	26.4
Both parents	52	33.5	52	33.5
Male children	18	11.6	30	19.3
Female children	73	47.1	76	49
Friends	28	18.1	37	23.9
Others (did not buy)	9	5.8	3	1.9
Type of bought products: (N=frequency)				
Food	51	32.9	87	56.1
Clothes	106	68.4	110	70.97
Restaurant service	69	44.5	72	46.4
Travel Ticket Reservation	36	23.2	27	17.4
Computer supplies	18	11.6	18	11.6
Durable home appliances	18	11.6	21	13.5
Furniture	9	5.8	18	11.6
Houseware	39	25.2	61	39.3
Hand sanitizer, alcohol, and disinfecting supplies	30	19.3	60	38.7
Carpets and furnishings	15	9.7	28	18.1
Medical devices	9	5.8	18	11.6
Others	13	8.4	6	3.9
Payment method:				
(N=frequency)				
Cash on delivery	142	91.6	137	88.4
Bank transfer	6	3.9	9	5.8
Credit card	42	27.1	51	32.9
Services (fawry, aman..etc)	15	9.7	27	17.4
Postal order	7	4.5	3	1.9
Preferred channel to buy:				
(N=frequency)				
Facebook	95	61.3	110	70.97
Instagram	37	23.9	46	29.7
WhatsApp	25	16.1	47	30.3
Telegram	13	8.4	10	6.4
Specialized websites (amazon, Jumia...etc)	64	41.3	73	47.1
Applications (talabat, otlob... etc)	46	29.7	70	45.2
Others	12	7.7	3	1.9

According to the previous online purchasing practices, the research results shown in table (5) showed that the level of online purchasing practices

before COVID-19 pandemic was low by 48.4% while it was medium during pandemic by 49.7%.

Table 5: distribution of the research sample according to the level of online purchasing practices used before and during the COVID-19 pandemic

Online purchasing practices	Before COVID-19 pandemic		Online purchasing practices	During COVID-19 pandemic	
	No (N=155)	%		No (N=155)	%
Low (<9)	75	48.4	Low (<11)	42	27.1
Medium (9- 13)	66	42.6	Medium (11- 14)	77	49.7
High (14 and more)	14	9	High (15 and more)	36	23.2

4. Results related to motivations towards online purchasing before and during the COVID-19 pandemic

Regarding to level of motivation types for online purchasing before and during the COVID-19 pandemic, the research results shown in table (6) showed no difference in price motivations as it was moderate before pandemic by 49% and moderate during pandemic by 41.3%. Also, no difference in product motivations as it was moderate before pandemic by 50.9% and moderate during pandemic by 49.7%.

While the research results showed strong level in effort motivations before and during pandemic by 48.4% and 54.8% respectively. And moderate level in personal motivations before and during pandemic by 47.1% and 49.7% respectively.

According to the previous types of motivations, the research results shown in table (7) showed that the level of motivations for online purchasing before COVID-19 pandemic was moderate by 54.8% while it was moderate and strong during pandemic by 47.1%.

5. Results related to compulsive buying scale during the COVID-19 pandemic

Regarding to the level of compulsive buying scale dimensions during the COVID-19 pandemic, the research results shown in table (8) showed low level of impulsiveness, compulsive behavior, pleasure of purchase, buying things that the individual does not need and negative emotions by 62.6%, 58.7%, 49%, 62.6%, 47.1% respectively.

Table 6: distribution of the research sample according to the level of motivation types for online purchasing before and during the COVID-19 pandemic

Types of Motivations	Range	Before COVID-19 pandemic		During COVID-19 pandemic	
		No (N=155)	%	No (N=155)	%
		Price motivations:	10		
Weak (<9)		31	20	27	17.4
Moderate (9- <13)		76	49	64	41.3
Strong (13 and more)		48	31	64	41.3
Effort motivations:	14				
Weak (<12)		19	12.3	12	7.7
Moderate (12- <17)		61	39.3	58	37.4
Strong (17 and more)		75	48.4	85	54.8
Personal motivations:	18				
Weak (<16)		73	47.1	60	38.7
Moderate (16- <23)		73	47.1	65	41.9
Strong (23 and more)		9	5.8	30	19.4
Product motivations:	14				
Weak (<13)		37	23.9	24	15.5
Moderate (13- <18)		79	50.9	77	49.7
Strong (18 and more)		39	25.2	54	34.8

Table 7: Distribution of the research sample according to the level of motivations for online purchasing before and during the COVID-19 pandemic

Motivations	Before COVID-19 pandemic		During COVID-19 pandemic	
	No (N=155)	%	No (N=155)	%
Weak (<45)	19	12.3	9	5.8
Moderate (45- <64)	85	54.8	73	47.1
Strong (64 and more)	51	32.9	73	47.1

Table 8: distribution of the research sample according to the level of compulsive buying scale dimensions during the COVID-19 pandemic

Compulsive buying scale dimensions	Range	No (N=155)	%
Impulsiveness:	18		
Low (<16)		97	62.6
Medium (16- <23)		40	25.8
High (23 and more)		18	11.6
Compulsive behavior:	10		
Low (<9)		91	58.7
Medium (9- <13)		49	31.6
High (13 and more)		15	9.7
Pleasure of purchase:	12		
Low (<11)		76	49
Medium (11- <15)		40	25.8
High (15 and more)		39	25.2
Buying things that the individual does not need:	8		
Low (<7)			
Medium (7- <10)		97	62.6
High (10 and more)		31	20
		27	17.4
Negative emotions:	12		
Low (<10)		73	47.1
Medium (10- <14)		49	31.6
High (14 and more)		33	21.3

According to the previous scale dimensions, the research results shown in table (9) showed that the level of compulsive buying during COVID-19 pandemic was low by 60.6%. This is considered as good indicator for the sample consumers under study, as they were not affected by the pandemic and it did not push them into an obsession for purchasing products.

Table 9: distribution of the research sample according to the level of compulsive buying during the COVID-19 pandemic

Compulsive buying	No (N=155)	%
Low (<52)	94	60.6
Medium (52- <72)	37	23.9
High (72 and more)	24	15.5

6. Results related to the statistical hypothesis

1- Results related to the significance of the relationship between the economic and the social characteristics of the consumers, both the online purchasing practices of consumers after COVID-19 pandemic and the motivations for purchasing after the COVID-19 pandemic and the compulsive buying obsession of consumers:

To check the validity of the first research hypothesis, which states that no significant correlation between the economic and social characteristics of the consumers under study as an independent variable, and both the online

purchasing practices of consumers after the COVID-19 pandemic and the motivations for purchasing after the COVID-19 pandemic as intermediate variables and the compulsive buying obsession of consumers as a dependent variable, The significance of the values of the Pearson simple correlation coefficient was studied for age, number of family members, average monthly income, and personal expense, while the significance of the values of the Spearman simple correlation coefficient was studied for each of the marital status, educational qualification, residential neighborhood, and occupation, and it was evident from the statistical results presented in Table (10) that there is a statistically significant inverse correlation of 0.01 between both of marital status and educational qualification with online purchasing practices as the value of the simple correlation coefficient were -0.284 and -0.229 respectively. It was found that there is a direct correlation with statistical significance at 0.05 between number of family members and the online purchasing practices as the value of the simple correlation coefficient was 0.198 while It was found that there is a direct statistically significant correlation of 0.01 between each of the source of income and personal expense with the online purchasing practices as the value of the simple correlation coefficient were 0.334, 0.270 respectively.

Table 10: The correlation between the socio-economic characteristics of the consumers and each of online purchasing practices and the motivations for purchasing after the COVID-19 pandemic and the compulsive buying obsession

Socio-economic characteristics \ variables	Online purchasing practices after COVID-19 pandemic	Motivations after COVID-19 pandemic	Compulsive buying obsession
Age	-0.121	-0.004	-0.232**
Marital status	-0.284**	-0.157	-0.255**
Educational qualification	-0.229**	-0.133	-0.299**
Occupation	0.033	-0.102	-0.298**
Neighborhood	0.101	-0.027	0.021
No of family members	0.198*	0.289**	0.512**
Family income	0.117	0.077	-0.163*
Source of income	0.334**	0.227**	0.213**
Personal expense	0.270**	0.155	-0.022

**Correlation is significant at the 0.01 level

*Correlation is significant at the 0.05 level

About motivations for purchasing after COVID-19 pandemic it was found that there is a positive correlation with statistical significance at 0.01 between each of the number of family members and the sources of income and motives for purchasing after COVID-19 as the value of the simple correlation coefficient were 0.289, and 0.227, respectively.

While regarding to compulsive buying obsession, it was found that a statistically significant inverse correlation of 0.01 between each of age, marital status, educational qualification, occupation and compulsive buying obsession as the value of the simple correlation coefficient were -0.232, -0.255, -0.299, and -0.298, respectively, and a positive correlation with statistical significance at 0.01 between each of no of family members and source of income and compulsive buying obsession as the value of the simple correlation coefficient were 0.512, and 0.213 respectively. It was found a statistically significant inverse correlation of 0.05 between family income and compulsive buying obsession as the value of the simple correlation coefficient was -0.163. From the above, the first research hypothesis can be partially rejected with some accepted portion.

2-Results related to the correlation between both the online purchasing practices of consumers and the motivations for purchasing after the COVID-19 pandemic and the compulsive buying obsession of consumers:

To check the validity of the second research hypothesis, which states that no significant correlation between both the online purchasing practices of the consumers after the COVID-19 pandemic and the motivations for purchasing after the COVID-19 pandemic as intermediate variables and the compulsive buying obsession of consumers as a dependent variable. The significance of the values of Pearson's simple correlation coefficient was studied, and it was clear from the statistical results presented in Table (11) that there is a positive correlation with statistical significance at 0.01 between each of online purchasing practices, motivations in general, price motives, effort motives, personal motives and product motives with compulsive buying obsession as the value of the simple correlation coefficient were 0.351, 0.631, 0.327, 0.349, 0.728, and 0.558, respectively. From the above, the second research hypothesis can be rejected.

Table 11: The correlation between both the online purchasing practices and the motivations for purchasing after the COVID-19 pandemic and the compulsive buying obsession

Online Purchasing practices / motivations	Compulsive buying obsession
Online Purchasing practices	0.351**
Motivations	0.631**
Price motives	0.327**
Effort motives	0.349**
Personal motives	0.728**
Product motives	0.558**

**Correlation is significant at the 0.01 level

That reflects the findings of Bayad (2020) in Iraq, the COVID-19 pandemic corresponded to a decrease of sales of Samsung electronics consumer durable goods, starting in February of 2020, when the virus first appeared in Iraq. It further correlated with a gradual drop in sales compared with the prior year.

Total sales during the first half of 2020 dropped by 24%, compared with sales in the first half of 2019. Moreover, consumption shifted toward more essential items, such as food. The quarantine and restrictions on movements may have contributed to this drop. It was noted that the demand for television sets, microwaves, and vacuum cleaners increased in 2020 compared to 2019, whereas the demand for air-conditioners, dishwashers, refrigerators, and washing machines decreased.

3-Results related to significant differences between the average levels of both online purchasing practices of consumers after the COVID-19 pandemic and the motivations for purchasing after the COVID-19 pandemic

according to the level of compulsive buying obsession of consumers:

To check the validity of the third research hypothesis, which states no significant differences between the average levels of both the online purchasing practices of consumers after the COVID-19 pandemic and the motivations for purchasing after the COVID-19 pandemic according to the level of compulsive buying obsession of consumers. The one-way analysis of variance test was applied and the least significant difference was evident from the statistical results presented in Table (12) that there are significant differences at the probability level of 0.01 between the average levels of online purchasing practices according to the level of compulsive buying obsession in favor of the high level then the medium level then the low level as the value of (F) was 8.7. While there are significant differences at the probability level of 0.01 between the average levels of motivations according to the level of compulsive buying obsession in favor of the high level then the medium level then the low level as the value of (F) was 27.9.

Table 12: The significant differences between the average levels of both online purchasing practices and the motivations for purchasing after the COVID-19 pandemic according to the level of compulsive buying obsession of consumers

Properties	Compulsive buying obsession	Average rating of characteristics	Direction of significant differences	F And degree of significance
Online Purchasing practices level	Low	11.8	C	8.7**
	Medium	13	B	
	High	14.2	A	
Motivations level	Low	56.2	C	27.9**
	Medium	67	B	
	High	73.1	A	
Price motives level	Low	10.6	B	6.7**
	Medium	12.7	A	
	High	11.7	AB	
Effort motives level	Low	16.4	B	7.2**
	Medium	17.4	B	
	High	19.6	A	
Personal motives level	Low	14.9	C	48.9**
	Medium	20.1	B	
	High	23	A	
Product motives level	Low	14.2	C	20.5**
	Medium	16.8	B	
	High	18.7	A	

**Correlation is significant at the 0.01 level

*** Similar letters indicate the absence of moral differences, and different letters indicate the presence of moral differences

Regarding to the motivations dimensions, there are significant difference at the probability level of 0.01 between the average levels of price motives according to the level of compulsive buying obsession in favor of the medium level then high level then low level as the value of (F) was 6.7, and about effort motives

it was found a significant difference at the probability level of 0.01 according to the level of compulsive buying obsession in favor of the high level then the medium level then the low level as the value of (F) was 7.2.

Also, there are a significant difference at the probability level of 0.01 between the average levels of personal motives according to the level of compulsive buying obsession in favor of the high level then medium level then low level as the value of (F) was 48.9. A significant difference at the probability level of 0.01 between the average levels of product motives according to the level of compulsive buying obsession in favor of the high level then the medium level then the low level as the value of (F) was 20.5. From the above, the third research hypothesis can be partially rejected with some accepted portion.

That reflects the findings of Hakim and Abdeljalil (2021) as he found Statistically significant differences between buying mania and the emergence of the COVID-19 epidemic with regard to demographic variables which is age, education, marital status, income.

4-Results related to the significant difference between change in online purchasing practices and the motivations for purchasing before and after the COVID-19 pandemic:

To check the validity of the fifth research hypothesis, which states that no significant difference of the change in online purchasing practices and the motivations for purchasing between before and after the COVID-19 pandemic, T- test was calculated, as shown by the statistical

results presented in Table (13) there is significant difference of the change in purchasing practices before and after COVID-19 pandemic at the probability level of 0.01 as the value of (F) was 0.391 and the differences were in favor (after) the pandemic. And there is a significant difference of the change in motivations before and after COVID-19 pandemic at the probability level of 0.05 as the value of (F) was 2.03 and the differences were in favor (after) the pandemic which is logic because a lot of consumers motives changed a lot after the pandemic therefore their online purchasing practices will change consequently. From the above, the fifth research hypothesis can be rejected.

5-Results related to significant impact of the online purchasing practices and the motivations for purchasing after the COVID-19 pandemic on compulsive buying obsession of consumers:

To check the validity of the fourth research hypothesis, which states that no significant impact of online purchasing practices of consumers after the COVID-19 pandemic and the motivations for purchasing after the COVID-19 pandemic on compulsive buying obsession of consumers, The multiple standard partial regression coefficient was calculated, as shown by the statistical results presented in Table (14) there are a significant impact of the level of both online purchasing practices and motivations after COVID-19 pandemic on compulsive buying obsession at a rate of 35.1% and 63.1% respectively at the probability level of 0.01 as the value of (F) were 21.5 and 101.3 respectively. From the above, the fourth research hypothesis can be rejected.

Hence as Hakim and Abdeljalil (2021) has confirmed, there is a weak effect of Corona pandemic on compulsive buying obsession of consumers.

Table 13: significant difference between change in online purchasing practices and motivations for purchasing before and after the COVID-19 pandemic

Characteristics	Time	Mean	Standard deviation	F	Significant degree
Purchasing practices	Before	9.4	2.9	0.391	0.01
	After	12.4	2.8		
Motivations	Before	57.6	12.7	2.03	0.05
	After	61.4	13.04		

Table 14: the significant impact of online purchasing practices and the motivations for purchasing after the COVID-19 pandemic on compulsive buying obsession

Characteristics	Compulsive buying obsession		
	Impact ratio	F value	Significant degree
Online Purchasing practices level	35.1%	21.5	0.01
Motivations level	63.1%	101.3	0.01

RECOMMENDATIONS

Based on what the results revealed there are a significant effect of the level of both purchasing practices and motivations after COVID-19 pandemic on compulsive buying obsession, it was possible to reach a set of proposed recommendations as follows:

- 1-Design and implementation of training courses by home economics specialists to support rational purchasing behavior and raise awareness of compulsive buying, especially during crises.
- 2-Directing civil society organizations and home economic experts to create specialized websites on the Internet to spread awareness, receive questions, and exchange experiences among various members of society about rational purchasing practices.
- 3-Addressing further research in the scope of purchasing obsession to contribute to the formation of a scientific background that can be useful in enriching the various aspects of scientific research in the future.
- 4-Businesses managers must pay close attention to changes in consumers' behavior to build plans and organize sales for the most effective way.
- 5-Food manufacturers need to upgrade more than their products, in addition to flavor, design, packaging, health factors should be top. Also, create healthy products that meet the right needs of consumers at the right time.
- 6-Business enterprises need to have a deep understanding of their target customers, how their consumption behavior has changed after the pandemic, since then. consistent with product, brand positioning and sales channel.
- 7-Enterprises have to change to find new markets after Covid 19 to match consumers' behavior. Specifically: promoting online sales channels (online), social networks to reach customers according to the capacity of the enterprise; Adjust Media channels based on consumer sentiment.

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الملخص العربي

أثر جائحة كورونا-كوفيد 19 على هوس الشراء القهري عبر الإنترنت في محافظة الإسكندرية

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بالتزامن مع جائحة كورونا، تأثر السلوك الشرائي للمستهلك بشكل كبير ودفع العديد من المستهلكين إلى التوجه إلى التجارة الإلكترونية مما تسبب في هوس الشراء لدى قطاع منهم، أو ما يعرف عند البعض بالشراء القهري. يهدف هذا البحث إلى تحديد تأثير فيروس كوفيد-19 على هوس الشراء القهري عبر الإنترنت. تم تجميع البيانات بواسطة إستمارة إستبيان عن طريق الإنترنت بالصدفة لعينة مكونة من 155 مستهلك.

وأظهرت النتائج وجود علاقة طردية ذات دلالة إحصائية عند مستوى 0.01 بين كل من الممارسات الشرائية، والدوافع بشكل عام، ودوافع السعر، ودوافع الجهد، ودوافع الشخصية، ودوافع المنتج مع هوس الشراء القهري. أيضاً توجد فروق ذات دلالة إحصائية عند مستوى احتمال 0.01 بين متوسطات كل من مستويات الممارسات الشرائية ومستويات الدوافع تبعاً لمستوى هوس الشراء القهري.

كما يوجد فرق معنوي لتغير كل من الممارسات الشرائية والدوافع بين قبل وبعد جائحة كوفيد-19 عند مستوى احتمال 0.05، وكانت الفروق لصالح بعد الجائحة. ويوجد تأثير معنوي لمستوى ممارسات ودوافع الشراء بعد جائحة كوفيد-19 على هوس الشراء القهري عند مستوى احتمال 0.01

الكلمات الإفتتاحية: هوس الشراء القهري - هوس الشراء - سلوك المستهلك - كوفيد-19