

**FACTORS AFFECTING TO MOVE CONSUMER BEHAVIOUR
TOWARDS ONLINE SHOPPING DURING COVID-19 PANDEMIC (WITH
SPECIAL REFERENCE TO GAMPAHA DISTRICT)**

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ABSTRACT

The COVID-19 epidemic that transpired in year 2020 became a new chapter in human history, and this has had an impact on consumer behavior. Even so, Sri Lankan consumers still feel insecure to use online shopping activities through internet devices, with the uncontrollable spread of COVID – 19, Sri Lankan consumers also have transposed their traditional buying behaviour and they have moved towards online shopping activities notably. Because online shopping can be considered as an important tool to maintain social distance, stay at home during pandemic situation and to protect from viruses. Therefore, the objective of carrying out this research study is to identifying the factors affecting to move consumer behaviour towards online shopping during the COVID – 19 pandemic with special reference to Gampaha District. This study has used five independent factors such as health factor, security factor, price factor, convenience factor and product factor. This study used primary data gathered from 140 consumers who are using online shopping during COVID – 19 pandemic, representing two divisional secretary divisions as Gampaha and Negombo. The convenience sampling method was used to choose consumers who purchase online, and the purposive sampling method was utilized to collect data from respondents with more knowledge and experience with online purchasing during the COVID – 19 epidemic. The researcher used four (04) months to complete this research work successfully. Reliability analysis, frequency analysis, descriptive statistics, correlation analysis, and regression analysis used to analyze data obtained through an online questionnaire. The main analysis method was regression analysis and as per the results of regression analysis, all independent factors such as health factor, security factor, price factor, convenience factor and product factor have a statistically significant impact on movements of consumer behaviour towards online shopping through the pandemic situation. Therefore, the researcher can recommend that consumers have moved towards online shopping after considering health factors, security factors, price factors, convenience factors and product factors.

Keywords: COVID - 19, Consumer Behaviour, Online Shopping

1. INTRODUCTION

1.1. Background of the Study

The current coronavirus outbreak has spread to many other countries around the world, which began in China in December 2019 (Kumaravel et al. 2020) More than 100,000 cases of coronavirus illness 2019 have been documented worldwide, with over 3500 deaths. Even though there is a lot of variety, COVID-19 is thought to

have a greater death rate than seasonal influenza (Adams and Walls, 2020). COVID-19 symptoms include dry cough, fever, and weariness, which are frequent in a variety of respiratory disorders among others as well as aches and pains, sore throat, and loss of smell. (Safara, 2020).

The COVID-19 pandemic has had a wide range of effects, including psychological, social, and economic ones (Bostan et al. 2020). Therefore, various research papers have been published on COVID-19 based on different criteria like psychological problems, transmission speed, vaccine production and general health. Further, consumer behaviour has changed towards online shopping from traditional shopping methods due to this pandemic situation. As a result of various constraints consumers and their purchasing patterns have changed dramatically. Furthermore, elements that impact new purchase patterns must be discovered in order for traders, retailers, and marketers to build effective strategies in order to respond for market-changing consumer trends (Valaskova et al. 2021).

Online shopping has evolved into a useful tool for keeping social distance, staying at home, avoiding viruses, and forming new relationships with both customers and business partners (Alam, 2020). If the number of people doing so surged considerably during the disease, customers had done online shopping before the coronavirus pandemic and as a result of COVID-19's high-speed transmission, clients must be aware of personal and social health issues like social distancing and remaining at home. These difficulties had a straight impact on internet shopping behavior (Safara, 2020).

The entire human race bears a critical obligation to combat this pandemic, and technological advancements are assisting them to a larger level (Kumaravel et al. 2020). The shift in buyer behavior has quickened, allowing businesses to contact even their most devoted brick-and-mortar customers in the digital environment with the advent of COVID-19. In order to adapt to the new normal, this tremendous issue is unprecedented, prompting enterprises to devise creative solutions (Carnevale and Hatak, 2020). Various types of businesses have been focused on finding new strategies to contact homebound clients and re-penetrate their markets after various restrictive lockdown restrictions and social-distancing techniques were implemented (Sheth, 2020). Online buying has become more common with payments and shipping made simple with the growing use of the internet and thanks to COVID-19, online shopping has become more appealing, given limited circumstances (Ali, 2020).

This research study focuses on identifying the factors affecting to move consumer behaviour towards online shopping during the COVID-19 pandemic in Gampaha district, Sri Lanka. The focus of this study aims on customers who used online shopping during the COVID-19 pandemic in two Gampaha district divisional secretary (DS) divisions. The reason to choose this area is, the consumers who are living in Gampaha district are very familiar with online shopping activities. Further, these consumers have a better knowledge about online shopping functions and they are in a correct and good position regarding these services. Therefore, choosing these consumers will help for the success of the research.

1.2. Problem Statement

The corona virus epidemic impacted various parts of people's lives. Essentially, this condition has compelled customers to engage in internet buying. Most consumers employed internet buying functions in past decades as well, but due to the pandemic situation, this has expanded to a significant extent. Not only young people, but adults also have moved to use online shopping. The reason is, consumers can't reach the physical shopping malls due to lockdown situations and health issues. Therefore, all consumers have to attend to online shopping functions if they dislike to use online shopping.

According to the data of the Department of Census and Statistics, computer literacy in Sri Lanka is 32.3% in 2020. If the number of information and communication technology devices is high, the usage of online shopping is less. This confirms that Sri Lankan consumers still feel insecure to use services through these devices. Because Sri Lankan consumers feel dealing with the physical market directly is much better than using online shopping to accomplish their daily activities. It means consumers seem still reluctant to use, or regularly use, the internet for their shopping activities (Huang and Oppewal, 2006). However, COVID – 19 pandemic has caused to change consumer habits from contact consumerism to untact consumerism and recently, the COVID – 19 pandemic has increased consumers' desire to not meet with others and, as such, increases in untact consumerism have been observed, not only in younger demographics, but also older demographics, where the use of smart phones and displays has become increasingly prevalent (Moon et al. 2021). As a result, most consumers have shifted to online purchasing because it is now required, and different variables have influenced consumer behavior toward online shopping during the COVID – 19 pandemic condition. That means if consumers are preferring to continue purchases from a physical store, they feel very convenient to shop online since it frees the customer from personally visiting the store during the pandemic situation (Shanthi and Kanniah, 2015).

Therefore, this research study is trying to answer the question of “What are the Factors Affecting to Move Consumer Behaviour towards Online Shopping during COVID-19 Pandemic?”

1.3 Research Objectives

The general objective of this study is to identify the factors affecting to move consumer behaviour towards online shopping during the COVID-19 pandemic.

Specific Objectives are as follows,

- To identify the impact of health factor on movements of consumer behaviour towards online shopping during the COVID-19 pandemic.
- To determine the impact of security factor on movements of consumer behaviour towards online shopping during the COVID-19 pandemic.
- To show the impact of price factor on movements of consumer behaviour towards online shopping during the COVID-19 pandemic.

- To demonstrate the impact of convenience factor on movements of consumer behaviour towards online shopping during the COVID-19 pandemic.
- To investigate the impact of product factor on movements of consumer behaviour towards online shopping during the COVID-19 pandemic.

1.4 Significance of the Study

This research is important in determining the factors that influenced customer behavior toward online buying during the COVID-19 pandemic, and it will help producers identify major aspects that influenced consumer online shopping behavior. Furthermore, the research study's findings will be useful as a reference source for future researchers interested in studying the elements influencing consumer behavior toward online buying during the COVID-19 epidemic.

2. LITERATURE REVIEW

2.1. Theoretical Review

2.1.1. Consumer Behaviour

Consumer behavior refers to the mental and physical behaviors that people do when they are looking for, assessing, purchasing, and using items and services (Cole, 2007). Consumer behavior is more than just buying things; it is the study of how having (or not having) things influences our lives and how possessions influence how we feel about ourselves and each other-our state of being (Solomon et al. 2012). Consumers make product choices all the time, with just a hazy understanding of the repercussions (Nelson, 1970). The impact of affect on customers' psychological functioning and behavior is widespread, even if it is typically underappreciated and unnoticed (Cohen and Areni, 1991).

2.1.2. Online Shopping

Since the late 1990s, online shopping has exploded as a growing number of people use the internet to buy a wider range of products. The ability of online businesses to attract and keep customers is important to their success, and study into the factors that influence consumer acceptance of online shopping has gotten a lot of attention (Zhou et al. 2007). While interactions in real-world shopping are primarily based on face-to-face encounters between customers and salespeople, electronic commerce interactions are primarily conducted through the retailer's website (Park and Kim, 2003). Consumers may access more information about products and services when they shop online, which allows them to compare prices and product quality with other manufacturers (Salehi et al. 2012). Because online consumer behavior is a complex socio-technical phenomenon involving too many variables, there is very little knowledge about it (Javadi et al. 2012). Customers in online retailers, on the other hand, have no idea what they're looking at when they search for and buy things. Furthermore, because there is no face-to-face connection in online retailers, customers may develop a low level of trust and perceive a high level of risk (Haubl and Murray, 2003).

2.1.3. Covid-19 Pandemic

In December 2019, the first case of Coronavirus Disease (COVID-19) was discovered in Wuhan, China. It then spread around the world, prompting the World Health Organization (WHO) to declare it a pandemic (Neger and Uddin, 2020). COVID-19 has wreaked havoc on the world economy in a variety of ways, including stock market closures, small business closures, corporate office closures, and the cancellation of large social events (Ozili and Arun, 2020).

COVID-19 has had a significant impact on our daily lives, enterprises, and global trade and travel. Coronavirus travels quickly from person to person, therefore early detection is critical for controlling the virus's spread (Haleem et al. 2020). During the past decade, many voices predicted that vital outbreaks would lead to pandemics, and epidemiologists, academics, policymakers, and multi-stakeholder simulations all pointed to critical gaps in the global capacity to contain a pandemic, attempting to persuade governments that health systems must be prepared to avoid large-scale catastrophe due to uncontrolled viral outbreaks (Vigo et al. 2020). COVID-19 has had a big impact on our daily lives, businesses, and international trade and travel. Because the coronavirus spreads swiftly from person to person, early diagnosis is crucial for limiting the virus's spread (Haleem et al. 2020). Many people predicted pandemics in the last decade, and epidemiologists, academics, policymakers, and multi-stakeholder simulations all pointed to critical gaps in the global capacity to contain a pandemic, attempting to persuade governments that health systems must be prepared to avoid large-scale catastrophe due to uncontrolled viral outbreaks (Vigo et al. 2020).

2.2. Empirical Review

2.2.1. Impact of Health on Movements

H1: Health factor could have a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.

Health aspect is a key variable to move consumers towards online shopping behaviours and considering rules implemented by the World Health Organization and with the aim of maintaining social distance, consumers are moving to online shopping. Further, there is a positive and significant influence of health on online buying behaviour under the coronavirus disease pandemic situation (Alam, 2020). Health risk is a major factor that has been caused to focus on online book shopping and it showed a significant impact on online book shopping during the COVID-19 pandemic (Nguyen et al. 2020)

2.2.2. Impact of Security on Movements

H2: Security factor will have a significant impact on the movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.

During COVID – 19 pandemic, the consumer behaviour changes a lot due to security factor and it gives a main consideration and security can be considered as a significant factor that affected move consumer behaviour towards online shopping during

pandemic situations (Gopinath, 2020). Because of various factors such as a lack of safe and secure websites, the security factor of not protecting consumer security and trustworthiness can be considered insignificant, and there is no significant link between consumers' internet shopping behavior during the coronavirus disease (COVID - 19) pandemic (Neger and Uddin, 2020).

2.2.3. Impact of Price on Movements

H3: Price factor could have a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.

Price factor can be viewed as a significantly associated element to online buying behavior under coronavirus illness pandemic condition based on various factors such as prices being cheaper at online shopping than in stores, appropriate delivery charges at online shopping (Alam, 2020). Price can be regarded a significant component and has a favorable effect on customer satisfaction during COVID-19 due to numerous factors such as gaining discounts at online shopping and the opportunity to pay using credit cards or other payment methods (Haryati et al. 2021).

2.2.4. Impact of Convenience on Movements

H4: Convenience factor would have a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.

Based on four dimensions of convenience such as search convenience, transaction convenience, possession convenience and access convenience, the convenience factor can be considered as a significant factor towards online shopping behaviour during the pandemic era (Kakar and Kakar, 2020). Convenience is a significant and positively related factor towards consumer behaviour trends during the COVID-19 pandemic due to various factors. Those factors are finding products online is easy and the ability to buy products at any time (24 hours a day) (Gopinath, 2020).

2.2.5. Impact of Product on Movements

H5: Product factor could have a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.

Due to COVID - 19, internet transactions are on the rise throughout the epidemic, and online shopping may be done without leaving the house and at any time. In addition, the product had a major impact on customer satisfaction (Maulana and Najib, 2021). Due to a variety of factors, product factors play a big role in the overall favorable buying behavior of consumers when it comes to critical commodities during lockdown (Shishpal et al. 2021).

3. METHODOLOGY

During the COVID - 19 epidemic, the quantitative method and deductive approaches were employed to explore the elements influencing customer behavior toward online buying. Primary data was gathered directly from respondents for this research study and the collected data were analyzed using the SPSS version 20 tool. Previous works of literature have been adopted to identify the independent variables that affected

move consumer behaviour towards online shopping like health factor, security factor, price factor, convenience factor and product factor. Summary of the variable links can be established and it shows the support of the variables for the study.

Table 01: Summary of Variable Links

Category	Variable	Description
Independent Variables	Health factor	Online shopping helps to adopt for rules of the World Health Organization and to protect from the virus during COVID - 19 situation.
	Security factor	Websites which are using at online shopping are safe, secure and bad effects are less that having to consumer security while using online shopping.
	Price factor	Prices are lower at online shopping than in stores and delivery charges are very reasonable in online shopping during the pandemic situation.
	Convenience factor	Ability to buy products at any time 24 hours of day through online shopping during pandemic situation.
Dependent Variable	Product factor	Ability to buy branding products and purchase diversified products during COVID - 19 pandemic.
	Movements of Consumer Behaviour	Online shopping helps to do my shopping activities continuously through online platform without much effort.

Source: Researcher Constructed (2021)

The following hypotheses can be constructed for testing purposes based on the conceptual framework.

H1: Health factor could have a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.

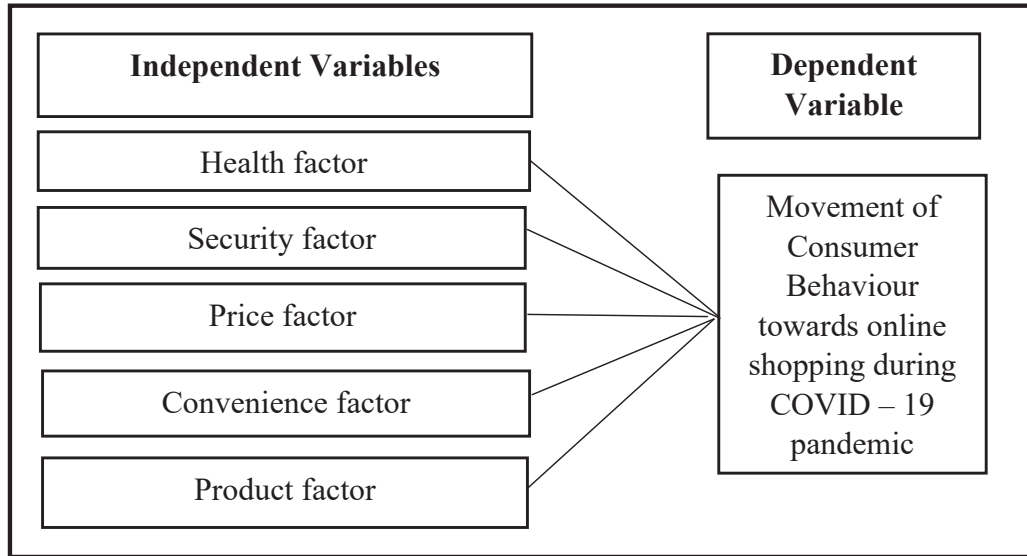
H2: Security factor will have a significant impact on the movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.

H3: Price factor could have a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.

H4: Convenience factor would have a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.

H5: Product factor could have a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.

Based on Table 1, following conceptual framework was developed.



Source: Researcher Constructed (2021)

Figure 1: Conceptual Framework

The indicators / measures of the above independent variables and dependent variable can be summarized as follows,

Table 02: Operationalization

Variable	Dimensions	Indicators
Online Shopping	Health factor	WHO rules Social distance Protect from virus
	Security factor	Safety Trustworthy websites Consumer security
	Price factor	Reasonable charges Discounts on products Credit facilities
Online Shopping	Convenience factor	Ease of use Availability of information
	Product factor	Branding and quality products New features Diversification
Movements of Consumer Behaviour	Quantitative and Qualitative Dimensions	Relative advantage
		Satisfaction

Source: Researcher Constructed (2021)

Customers in two divisional secretary divisions (DS divisions) in Gampaha district who used internet purchasing during the COVID - 19 pandemic are the target population.. They are Gampaha and Negombo. Because consumers who are in Gampaha district have better knowledge about online shopping activities than others (Hettiarachchi, 2013). The sample of this research is 140 respondents from the total population based on the Krejcie and Morgan table. During the COVID - 19 epidemic, the convenience sampling method was utilized to select customers who purchase online. Purposive sampling was employed to collect data from respondents who had more knowledge and experience with internet buying during a pandemic situation, which is appropriate for achieving the research goal. The researcher used four (04) months to complete this research study. To perform this study, the researcher primarily relied on primary data. An online questionnaire was used to collect primary data about online shopping behavior during the COVID - 19 pandemic situation, and this method assisted to gain first-hand information from the respondents. This study's questionnaire has a total of twenty-three (23) items that were prepared based on the primary independent and dependent variables. The online questionnaire was divided into seven pieces. The researcher analyzed data in terms of align with the objective of the study already proposed after the data gathering process. The secondary data was collected from the other research findings that have already been investigated in relation to this study.

4. RESULTS

For data analysis, the researcher utilized the Statistical Package for Social Science (SPSS) version 20 and performed reliability analysis, frequency analysis, descriptive statistics, correlation analysis, and regression analysis using SPSS version 20. Normality measures the distribution of the test is normally distributed with zero mean value, one standard deviation and a symmetric bell shaped curve. To test the assumption of normality, kurtosis analysis can be applied. According to kurtosis value, except security factor and price factor all other variables have positive kurtosis. It shows health, convenience, product and movements of consumer behaviour towards online shopping have higher tail distribution. But security factor and price factor show a negative kurtosis value which is less than zero and it shows a right tail distribution. Reliability testing measure the validity of the questionnaire and it assumes that, if the Cronbach's Alpha value is greater than 0.7, the questionnaire is a reliable one. The Cronbach's Alpha value of health, security, price, convenience, product and movements of consumer behaviour towards online shopping remained as 0.888, 0.861, 0.837, 0.865, 0.865 and 0.832. It means according to the reliability analysis, Cronbach's Alpha value of all independent variables and the dependent variable was higher than 0.7 and therefore, the questionnaire used by the researcher was a reliable one.

4.1 Examining Respondents' Profile

As per the data analysis, out of 140 respondents, 39.3% were male and 60.7% were female. Further, it can be noted that 61.4% of the respondents were married and 38.6% were single. Most of the respondents who are using online shopping activities

during pandemic situations were in the age category of 21-30 years as 40%. Others were 31-40 years, 41-50 years and more than 50 years as 28.5%, 23.6% and 7.9% respectively. Out of the respondents, 5.7% has a post-graduate degree, 27.1% has a bachelor's degree, 17.1% has professional qualifications, 18.6% has a diploma, 25% has passed A/L and 6.4% has passed O/L. Further, it should be noted that the majority of the respondents were private employees 47.9%. 18.6% were self-employed, 23.5% were government employees and 10% were unemployed. 38.6% of respondents lie income up to Rs. 30000, 31.4% of respondents lie income between Rs. 30001 – Rs. 40000, 15.7% of respondents lie income between Rs. 40001 – Rs. 50000 and 14.3% of respondents lie income between Rs. 50001 and above.

The majority of the respondents have used online shopping activities during pandemic situations to buy groceries as 32.1%. 8.6% has used online shopping to buy books, 11.4% of respondents have used online shopping to buy medicine. 18.6% of respondents were used online shopping to buy clothes and 29.3% of respondents were used online shopping to buy others. Most of the respondents have used online shopping once a month as 60.7%. 7.2% of respondents have used online shopping twice a week, 10% has used online shopping once a week and 22.1% of respondents have used online shopping twice a month.

4.2 Descriptive Analysis and Correlation Analysis

As illustrated in Table 1, the mean value of health, security, price, convenience and product were 4.2357, 3.0071, 3.2214, 4.2357 and 3.9357 respectively. Security factor has the highest standard deviation and product factor has the lowest standard deviation value. Pearson correlation was utilized to determine the type and degree of the link between the dependent variable and the independent variables.

Before the testing of Pearson correlation some assumptions were used such as each variable should be continuous, should have a pairs of value and linearity. Pearson correlation values of health, security, price, convenience and product were 0.510, 0.181, 0.415, 0.738 and 0.732 respectively. It means all independent variables have a positive correlation with moving consumer behaviour towards online shopping during COVID – 19 pandemic. According to the results of correlation analysis, the significance value of all independent variables was 0.000 except security factor and the significance value of security factor was 0.032 at 0.01 significance level.

Table 03: Descriptive Statistics, Correlations

Variable	Mean	Standard Deviation	Pearson Correlation	Significance Value (p-value)
Health	4.2357	0.80117	0.510	0.000
Security	3.0071	0.88551	0.181	0.032
Price	3.2214	0.83164	0.415	0.000
Convenience	4.2357	0.83632	0.738	0.000
Product	3.9357	0.69127	0.732	0.000

Source: SPSS data (2020)

4.3 Regression Analysis

In this research study, R-value was 0.835. R square (R^2) value was 0.698 and it implies that the proportion of the variance in the dependent variable is predictable by the independent variables. The adjusted R square value was 0.686 in this research study and Further, Durbin – Watson value was 1.960. It means there is no first-order linear autocorrelation between variables since it was in between $1.5 < d < 2$.

Table 04: Regression Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.835 ^a	.698	.686	.39252	1.960

a. Predictors: (Constant), Health, Security, Price, Convenience, product

b. Dependent Variable: Movement of Consumer Behaviour towards online shopping during COVID – 19 pandemic

Source: SPSS data (2020)

Table 05: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	0.693	0.229		3.025	0.003
	Health	0.185	0.052	0.211	3.535	0.001
	Security	0.103	0.049	0.130	2.097	0.038
	Price	0.106	0.052	0.126	2.039	0.043
	Convenience	0.295	0.056	0.352	5.246	0.000
	Product	0.418	0.064	0.412	6.483	0.000

Source: SPSS data (2020)

As revealed in Table 3, the following model can be derived for the movements of consumer behaviour towards online shopping during the COVID - 19 pandemic.

$$MCBOS = 0.693 + 0.185(H) + 0.103(S) + 0.106(PRI) + 0.295(C) + 0.418(PRO) + \mu$$

According to the results of regression analysis, health factor positively related to the movements of consumer behaviour towards online shopping as its coefficient was 0.185. Security factor also positively related with the movements of consumer behaviour towards online shopping and the coefficient value was 0.103. Price factor, convenience factor and product factor positively related with the movements of consumer behaviour towards online shopping during COVID – 19 pandemic and the coefficient values were 0.106, 0.295 and 0.418 respectively. The significance value of health factor, security factor, price factor, convenience factor and product factor were 0.001, 0.038, 0.043, 0.000 and 0.000 respectively. Based on the results, all the independent variables such as health, security, price, convenience and product were considered as statistically significant variables that affected to move the consumer behaviour towards online shopping during the COVID – 19 pandemic due to p values of all these five factors were less than 5% significant level.

4.4 Testing of the Hypotheses

Table 06: Summary of Testing Hypotheses

Variable	Hypothesis	P Value	Impact	Accept / Reject
Health factor	H1: Health factor could have a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.	0.001	Significant	Accepted
Security factor	H2: Security factor will have a significant impact on the movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.	0.038	Significant	Accepted
Price factor	H3: Price factor could have a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.	0.043	Significant	Accepted
Convenience factor	H4: Convenience factor would have a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.	0.000	Significant	Accepted
Product factor	H5: Product factor could have a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic.	0.000	Significant	Accepted

Source: SPSS data (2020)

5. DISCUSSION

The researcher's questionnaire was found to be reliable based on the results of the reliability study. Because all independent variables and the dependent variable have Cronbach's Alpha values greater than 0.7. The researcher has analyzed the profile of the respondents based on the different criteria and accordingly, the majority of the respondents were female. It means that female respondents were using online shopping during the COVID-19 pandemic rather than male respondents. In addition, the majority of the respondents were married, and the majority of the respondents were between the ages of 21-30. Moreover, besides highest respondents were from the bachelor's degree category. Further, most of the respondents were private employees. The income level of the majority of the respondents lie up to Rs. 30000. Not only that, the larger part of the respondents has used online shopping to buy groceries, once a month during the pandemic situation.

According to the descriptive analysis, security factor has the lowest mean value of 3.0071 and both health factor and convenience factor has the highest mean value of 4.2357. It implied that security factor was highly dispersing from the mean value and

both health factor and convenience factor has the data set has been dispersed close to the mean value. Due to that reason, security factor has the highest standard deviation.

According to the findings of the correlation research, the convenience factor and the product factor have a substantial positive link with shifting consumer behavior to online buying during a pandemic. Further, health factor and price factor shows a moderate positive correlation and security factor shows a weak positive correlation with moving consumer behaviour towards online shopping during COVID – 19 pandemic. Further, health factor, price factor, convenience factor and product factor were statistically significant variables at 0.01 significant level. But security factor was a statistically insignificant variable because p-value of security factor was higher than 0.01. (At 0.01 significant level).

According to the regression analysis, the R square value was 0.698, implying that 69.8% of changes in customer behavior toward online buying during the COVID – 19 pandemic can be explained by independent variables like health, security, price, convenience, and product. The rest of 30.2% of movements of consumer behaviour towards online shopping depends on the other variables which are not covered by the current research study. As per the results of regression analysis, health factor has a significant impact on the movements of consumer behaviour towards online shopping during COVID – 19 pandemic. Because to maintain the social distance, protect from the virus and to adopt for WHO rules consumers are moving to online shopping (Nguyen et al. 2020), (Alam, 2020), and other previous researches. Security factor also has a significant impact on movements of consumer behaviour towards online shopping during the pandemic situation. This has been proved from previous research (Gopinath, 2020) and other research. However, some of the researchers like (Neger and Uddin, 2020) have proved that security factor has not had a significant impact to move consumer behaviour towards online shopping during COVID – 19 pandemic situation. Changes of safety according to the changes with the time, lack of trustworthy websites can be affected for significance or insignificance of the security factor. Price factor has a significant impact to move consumer behaviour towards online shopping during the pandemic situation due to charging reasonable charges, receiving discounts and credit facilities at the selling (Haryati et al. 2021; Alam, 2020) and other researches. According to the regression analysis, the convenience factor showed a significant impact to move consumer behaviour towards online shopping during the COVID – 19 pandemic situation since ease of use and availability of information (Kakar and Kakar, 2020), (Gopinath, 2020) and other researches. Product factor has a significant impact on movements of consumer behaviour towards online shopping during the COVID – 19 pandemic and ability of getting branding and quality products, introducing new features and diversification can be caused for the significant impact to move towards online shopping (Shishpal et al. 2021), (Maulana and Najib, 2021) and others.

6. CONCLUSIONS AND RECOMMENDATIONS

The emergence of online shopping activities has had a significant impact on consumers' day-to-day activities, and it has now become a fundamental part of their lives. The use of online buying activities has increased dramatically since the

outbreak of the COVID – 19 pandemic. It means with the huge spread of COVID – 19, the usage of online shopping has become a compulsory function to accomplish their daily tasks. Due to a lack of awareness about how to use wireless technology, there is a problem with Sri Lankan clients engaging online buying activities. Even so, with the impact of some factors, consumers have moved to use online shopping activities during COVID – 19 situation. Therefore, this research study has been carried out with the main objective to identify the factors affecting to move consumer behaviour towards online shopping during the COVID - 19 pandemic with special reference to Gampaha district, Sri Lanka. In this research study, the researcher has used movements of consumer behaviour towards online shopping during the COVID - 19 pandemic as the dependent variable and five independent variables such as health, security, price, convenience and product. Data were gathered by using an online questionnaire from 140 consumers who were using online shopping during the COVID - 19 pandemic situation in two divisional secretary (DS) divisions as Gampaha and Negombo in Gampaha district.

Data was analyzed using reliability analysis, frequency analysis, descriptive statistics, correlation analysis, and regression analysis. According to reliability analysis, the questionnaire that has used to collect data was a reliable one. Descriptive analysis has mentioned that security factor has the lowest mean value and both health factor and convenience factor has the highest mean value. As per the findings of correlation analysis, all independent variables showed a positive correlation with moving consumer behaviour towards online shopping during COVID – 19 pandemic. Further, all independent variables were statistically significant variables except security factor on moving consumer behaviour towards online shopping at 1% significant level. Regression analysis was the main data analysis technique and through the regression analysis researcher found that all independent variables such as health factor, security factor, price factor, convenience factor and product factor were statistically significant variables that positively affected to move the consumer behaviour towards online shopping during COVID – 19 pandemic at 5% significant level.

Consumers have shifted to online shopping activities during the COVID – 19 epidemic for a variety of reasons, including a lack of information about how to utilize online services, according to the researcher. Few of them are online shopping is helping to adopt for rules and regulations of the World Health Organization during COVID - 19 situation, ability to use trustworthy and safe websites to keep up online shopping activities, charging reasonable delivery charges at the online shopping, ability to get 24 hours' services and potentiality to buy fresh and diversified products. This research study has focused only on the consumers who are in urban areas. Therefore, future researchers have an opportunity to conduct their research focusing on both rural and urban communities. Moreover, the researcher has used only five independent variables. Furthermore, other independent variables such as payment factor, administrative factor and psychological factor can use to analyze the movements towards online shopping during COVID – 19 pandemic. Those can be presented as suggestions for future researchers.

REFERENCES

- Adams, J. G. and Walls, R. M., 2020. Supporting the Health Care Workforce During the COVID-19 Global Epidemic. *COVID-19 Resource Center*, 323(15), pp. 1439-1440.
- Alam, J., 2020. Buying Behaviour Under Coronavirus Disease (COVID-19) Pandemic Situation: A Online Perspective Case in Bangladeshi Shoppers. *Chineses Business Review*, 19(3), pp. 82-90.
- Ali, B. J., 2020. Impact of COVID-19 on consumer buying behaviour toward online shopping in Iraq. *Economic Studies Journal*, 18(42), pp. 267-280.
- Bostan, S., 2020. The Effect of COVID-19 Pandemic on the Turkish Society. *Electronic Journal of General Medicine*, 17(6), pp. 2516-3507
- Carnevale, J. B. and Hatak, I., 2020. Employee Adjustment and Well-being in the era of COVID-19: Implications for Human Resource Management. *Journal of Business Research*, 116, pp. 183-187.
- Cohen, J. B. and Areni, C. S., 1991. Affect and Consumer Behaviour. *Sydney Business School - Papers*, pp. 188-240.
- Gopinath, V., 2020. Consumer Behaviour Trends During COVID-19 Pandemic. *International Journal of Scientific Development and Research (IJS DR)*, 5(9), pp. 310-313.
- Haleem, A., Javid, M. and Vaishya, R., 2020. Effects of COVID-19 Pandemic in Daily Life. *Current Medicine Research and Practice*, 10(2), pp. 78.
- Haryati, N., Syah, Y. A. and Putri, R. W., 2021. Customer Satisfaction on Premium Coffee Shop Consumption in the COVID-19 Pandemic (Case Study in Indonesia).
- Haubl, G. and Murray, K. B., 2003. Preference Construction and Persistence in Digital Marketplaces: The role of electronic recommendation agents. *Journal of Consumer Psychology*, 13(1-2), pp. 75-91.
- Hettiarachchi, H., 2013. Factors Affecting to Customer Adoption in Internet Banking. *Kelaniya Journal of Management*, 2(2).
- Javadi, M. H. M., 2012. An Analysis of Factors Affecting on Online Shopping Behaviour of Consumers. *International Journal of Marketing Studies*, 4(5), pp. 81.
- Kakar, A. and Kakar, A. K., 2020. Identifying the Determinant Dimensions of Shopper Convenience for Online Versus Instore shopping in the Pre and Post COVID-19 Eras. *Pacific Asia Journal of the Association for Information Systems*, 12(4), pp. 4.
- Kumaravel, S. K., 2020. Investigation on the impacts of COVID-19 quarantine on society and environment: Preventive measures and supportive technologies. *King Abdulaziz City for Science and Technology*, 10(9), pp. 1-24.

- Maulana, S. and Najib, M., 2021. Analysis of the Effect of Marketing Mix on Consumer Trust and Satisfaction on Online Purchasing of Organic Food during the Outbreak of the COVID-19. *Journal Aplikasi Manajemen*, 19 (2), pp. 257-271
- Neger, M. and Uddin, B., 2020. Factors Affecting Consumers' Internet Shopping Behaviour During the COVID-19 Pandemic: Evidence from Bangladesh. *Chinese Business Review*, 19(3), pp. 91-104.
- Nelson, P., 1970. Information and Consumer Behaviour. *Journal of Political Economy*, 78 (2), pp. 311-329.
- Nguyen, H. V., 2020. Online Book Shopping in Vietnam: The Impact of the COVID-19 Pandemic Situation. *Springer Science+Business Media, LLC, Part of Springer Nature*, 36(3), pp. 437-445.
- Ozili, P. K. and Arun, T., 2020. Spillover of COVID-19: Impact on the Global Economy, SSRN 3562570.
- Park, C.-H. and Kim, Y.-G., 2003. Identifying key factors affecting consumer purchase behaviour in an online shopping context. *International Journal of Retail and Distribution Management*, 31(1), pp. 16-29.
- Safara, F., 2020. A Computational Model to Predict Consumer Behaviour During COVID-19 Pandemic. *Springer Science+Business Media, LLC, Part of Springer Nature*, pp. 1-14.
- Salehi, F., Abdollahbeigi, B., Langroudi, A. C. and Salehi, F., 2012. The Impact of Website Information Convenience on E-Commerce Success of Companies. *Procedia-Social and Behavioural Sciences*, 57, pp. 381-387.
- Sayyida, Hartini, S., Gunawan, S. and Husin, S. N., 2021. The Impact of the COVID - 19 Pandemic on Retail Consumer Behaviour. *ATM*, 5(1), pp. 79-88.
- Sheth, J., 2020. Impact of COVID-19 on Consumer Behaviour: Will the Old Habits Return or Die?. *Journal of Business Research*, 117, pp. 280-283.
- Shishpal, Yadav, A., Kumar, P. and Parmod., 2021. Impact of COVID-19 on Consumers' Essential Buying Behaviour - An Indian Perspective. *International Journal of Management (IJM)*, 12(1).
- Valaskova, K., Durana, P. and Adamko, P., 2021. Changes in Consumers' Purchase Patterns as a Consequence of the COVID-19 Pandemic. *Mathematics*, 9(15), pp. 1788.
- Vigo, D., 2020. Mental Health of Communities During the COVID-19 Pandemic. *The Canadian Journal of Psychiatry*, 65(10), pp. 681-687.
- Zhou, L., Dai, L. and Zhang, D., 2007. Online Shopping Acceptance Model - A Critical Survey of Consumer Factors in Online Shopping. *Journal of Electronic Commerce Research*, 8(1), pp. 41.