THE COVID-19 PANDEMIC OUTBREAK AND CONSUMER BEHAVIOUR: AN ONLINE SURVEY OF PEOPLE IN SOUTH-SOUTH NIGERIA

[1]KOGINAM, OWUDUMOPU ALEX & [2]EKIYE EBIPUAMERE

[1]Department of Economics and Development Studies, Federal University Otuoke

[2]Department of Banking and Finance, Federal Polytechnic, Ekowe

Abstract

Nigeria had its first coronavirus disease (COVID-19) case on 27 February 2020 in an individual who returned from travelling overseas. Since then, cases of affected persons have steadily increased as the pandemic has spread to all states in the country. Containment measures by the Nigeria government to curb the spread of the virus ensured social distance and restricted the movement of persons and trade. However, it also disrupted the normal consumption habits of people. This study examined the effect of COVID-19 on the consumption behaviour of people in South-South region of Nigeria starting from the spread of the virus and the subsequent imposed lock-downs in most states of the country. The study utilised an online survey instrument and the sample period spans from 13 March 2020 to 30 June 2020. The data were analysed using Descriptive statistics and one-way ANOVA technique. The study reveals that Nigerians are aware of the outbreak of COVID-19 in the country and are mostly concerned about its effect on their health, personal finance and economy. Moreover, the pandemic has changed the daily spending habits of the people as e-payment rather than cash is preferred for making payments while physical transactions are preferred to e-commerce. In addition, the study shows that consumer spending for food, medicine, gasoline and sanitizers has increased beyond previous levels since the outbreakand there are significant differences in the rise in spending amongst age groups for food and medicine.The results are particularly relevant for government agencies saddled with designing fiscal and monetary policies to revamp the post COVID-19 economy. Based on the findings, the study recommends that the health sector be accorded the 15% minimum budget allocation stipulated by the World Health Organisation in order to meet the increasing demands for health services by Nigerians.

Keywords: Covid-19, Consumer Behaviour, Pandemic, South-South, Nigeria

Introduction

The scale of challenge an outbreak of infectious disease can create on the economy of the world has assumed new proportions with the unprecedented spread of the novel coronavirus (COVID-19). The COVID-19 outbreakwhich began in Wuhan-China has infected over 7 million people and killed more than 419,766 persons worldwide since its outbreak in November 2019 (World Health Organization, 2020). The coronavirus disease as COVID-19 is also called is a highly transmittable and pathogenic viral infection caused by severe acute respiratory syndrome and there is no clinically approved antiviral drug or vaccine that could be used against the disease (Shereen, Khan, Kazmi, Bashir& Siddique, 2020). In fact, the severity of the challenge posed by the outbreak of the pandemic on global tradeis appreciable when the number of countries that imposed partial/total shut-down of commercial activities and restrictedmovement of people in and out of their bordersto limit the rate of spread of the disease are appraised.

The COVID-19 outbreak is unprecedented as it is far more severe than the Ebola reported in 2014 given the death toll from the virus and its effect on the global economy. The effect of the epidemic is even more worrying when viewed within the contexts of mass poverty, poor health infrastructure, child malnutrition and high unemployment that continue to affect developing countries, hence, indicating its exceptional severity and magnitude.The association between health and economic growth is well established. It is noted that health is a key catalyst of income and economic growth, and a pandemic such as the COVID-19 could reduce investment, consumption expenditure and economic growth (World Bank, 2020).

In Nigeria, the outbreak of the pandemic has imposed substantial cost on the economy and health of the people given its poor infrastructure and weak health institutions.In particular, the COVID-19 disease is contagious, hence, government containment measures have emphasised the restriction of movement of persons and the promotion of social distancing measures. However, these preventive measures imposed direct and indirect costs on the economy. The direct costs include the restriction on transportation of people and goods, and reduction in supply, export, import and production activities.

Moreover, the government would incur cost in the implementation and enforcement of medical protocols to control the spread of the pandemic. These costs include the cost of hospitalization, costs of research and development of new therapies and vaccines. Direct costs also include out-of-pocket expenditures made by diseased households not covered by national health insurance schemes. Indirect costs arise as a result of aversion interventions that are either imposed by the government or self- imposed by the individual to mitigate the probability of contracting the virus. The result of all these costs induces both supply and demand shocks on the economy (Rima, 2020). Moreover, an economic valuation of the number of deaths as a result of the virus also places a high cost on the economy.

In effect, the outbreak of COVID-19 may impose substantial cost on the economy as people are likely to change their behaviour and lifestyle in the interim. Thus, although the pandemic is primarily a health crisis, it creates economic and social disruptions in the fabric of the society. Moreover, the restriction on gatherings and movements of people and goods enforced by the government may have repercussions beyond the direct impact on health. In fact, behavioural effects – related to the way risks are perceived and handled – can often be more significant from a socio-economic viewpoint than the effects of sickness and mortality themselves (Food and Agricultural Organisation, 2016). Similarly, the policy responses implemented to contain the outbreak and protect public health may send perverse signals to consumers that could impede on the performance of trade and investment activities and lead to higher indirect cost on the economy than the impact of the disease itself. Moreso, low income households and small businesses may be the worst-hit by such containment measures.

Moreover, the Nigerian economy has not recovered from the effects of the 2006 economic recession which crippled demand and supply activities. Consequently, it continues to grapple with high unemployment, poverty and poor health and social infrastructure. Therefore, the domestic spread of COVID-19 may worsen the precarious situation faced by the people and alter consumers spending behaviour, undermine consumer and business confidence and disrupt production activities with deeply negative consequences for the economy (World Bank, 2020). In addition, the government policy response to

the pandemic implicitly requires several adjustments in consumer behaviour. Hence, as people explore ways to mitigate the risks of contracting the virus, these behavioral adjustments could impact on the performance of the economy.Consequently, it is imperative to examine the effect of the COVID-19 pandemic on consumer behaviour in Nigeria.

Hypotheses

(i) There is no significant difference in the pattern of consumer spendings among age groups for food and medicine since the outbreak of Covid-19.

(ii) There is no significant difference in consumption expenditure level for both male and female since the outbreak of Covid-19.

The emphasis on the consumer is in recognition of the primary role of consumption expenditure in the economy growth of Nigeria, hence to address the foregoing hypotheses the rest of the study is organized in six (6) sections. Following the background to the study is the literature review in section 2 which discussed the history and spread of the novel coronavirus in Nigeria and reviews related literature while the research methodology is in section 3. Data analysis and discussion of findings is discussed in section 4. The conclusion and policy are contained in section 5.

Literature Review

Brief History of Covid-19 and its Spread in Nigeria

China's Wuhan city recorded the first confirmed case of COVID-19 before the global spread to other countries. The first case of the virus in Nigeria was identified on the 27th of February, 2020 in Ogun state from a foreign national working in the country. The index case was reported to have returned from a foreign trip. However, by the end of March, the virus had spread to the northern and southern parts of the country as eleven (11) more states had reported a case of the virus. The affected states and the number of cases are as displayed in table 1.

Table 1. States affected and number of laboratory confirmed cases as at March, 31st 2020

Lagos	Oyo	Osun	Ogun	Ekiti	Edo	Enugu	Rivers	Kaduna	Bauchi	Benue	FCT	TOTAL
82	8	5	4	1	2	2	1	3	2	1	28	139

Source: NCDC, 2020.

These early cases of the novel coronavirus were largely linked with travelling to high risk countries and contact with confirmed cases (Nigeria Centre for Disease Control, 2020). In the South-South region of Nigeria, the first case of COVID-19 was confirmed in Edo State on 23March 2020 from an individual that travelled to a high risk country. The first death from COVID-19 in Nigeria was reported on the 23rd of March at the Federal Capital Territory, FCT (Nigeria Centre for Disease Control, 2020). Accordingly, by the end of April, daily number of confirmed cases had exceeded two hundred as the virus spread to thirty-five (35) states. The rapid spread of the virus necessitated the response of both federal and state governments to safeguard the populace. In fact, as indicated in figure 1, at the end of June, Lagos state had more than 10,000 confirmed cases of COVID-19.

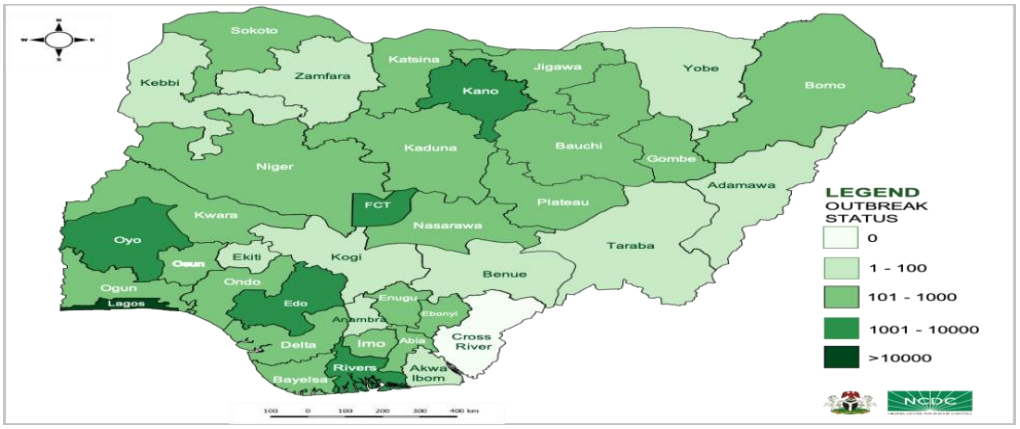


Figure 1: Spread of COVID-19 in Nigeria (30 June, 2020)
Source: NCDC, 2020.

The outbreak of the pandemic in Nigeria raises two main issues of concern. These issues are the gender and age-group most affected by COVID-19 in Nigeria. The NCDC (2020), affirms that confirmed cases of the virus indicate that people within the age bracket of 31-40 years contracted the virus more than other age-brackets.Moreover, male members of the populations contracted the virus more than their female counterparts. This outcome is important when viewed against the backdrop that the age bracket falls within the most active segment of the labour force in Nigeria. The COVID-19 virus can cause a range of symptom in people ranging from difficulty in breathing, fatigue and muscle ache (WHO, 2020).

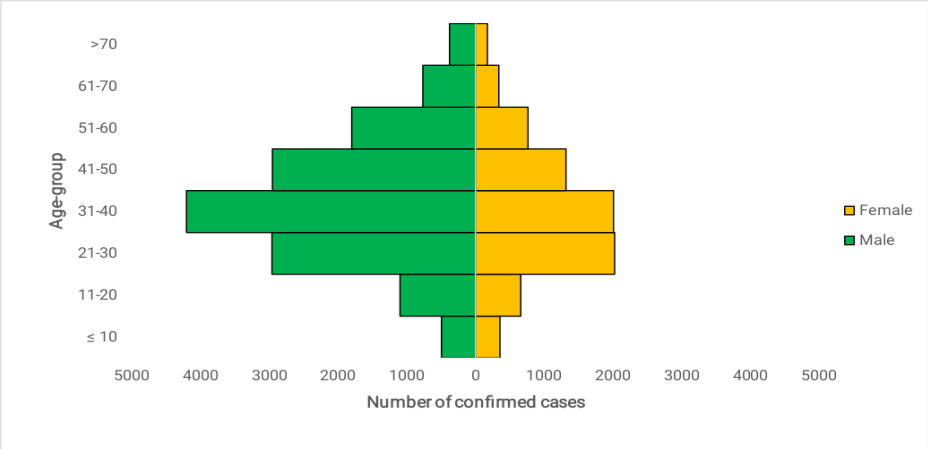


Figure 2: Age-Sex Distribution of Confirmed Cases (Week 19 – WeeK27)
Source: NCDC, 2020.

The labour force is the engine of economic progress in any country hence, distortion in the economy occasioned by an epidemic outbreak could reduce aggregate output through change in consumption behaviour of households. Accordingly, several policy responses have been specified by the federal and state governments to halt the spread of the pandemic. Though, the initial response by the federal government was focused on increased surveillance of all border entry points to ensure prevention and control of the spread of the virus. This was then followed by the restriction of movements in three states- F.C.T, Lagos and Ogun- on the 30th of March, 2020. Similarly, several states in the country also introduced restrictions barring inter-state movement of persons and goods and emphasized the importance of social distance to limit the spread of the virus. This policy response to the pandemic by the

government has effectively shut down most sectors of the economy, including industry, construction, education and transportation. However, these measures may have divergent impact on the consumption habits of younger individuals given their fluid lifestyles and older people.

Conceptual Literature

COVID-19

Coronavirus are a group of virus that can cause disease in both animals and humans. A good example of this type of virus is the Middle East Respiratory Syndrome coronavirus (MERS-CoV) strain that impacted South Korea in 2015. However, this strain of the coronavirus is new and was first identified in December 2019 in Wuhan, Hubei, China. The World Health Organisation (WHO) officially called the virus "COVID-19", on 11 February, 2020. The name reflects the type of virus and the year the strain was first noticed in the world (Wikipedia, 2019).

World Health Organisation (2020) designated the disease a pandemic due to its rapid spread across national borders and among human beings. The disease is most contagious when a person's symptoms are at their peak. Furthermore, the spread of the virus is made easy via contact with small droplets from infected persons especially when they cough, sneeze, talk or sing (Centers for Disease Control and Prevention, 2020). In addition, the spread of COVID-19 could also be indirect when people do not wash their hands after trade or socializing (Centers for Disease Control and Prevention, 2020).

The emergence of the virus has impacted severely on the behaviour of consumers and the economic expectations of most countries of the world with notable changes in how people socialize and engage in physical trade and commerce activities. These direct changes in the flow and interaction of people are sustained by containment measures put in place by national governments all over the world.

Consumer Behaviour

Behaviours that are displayed by an individual while buying, consuming or disposing any particular product or service is referred to as consumer behaviour (Solomon, 2009). A consumer is motivated by several factors in the

decision to purchase goods or services. The study of the motivations that surround the buying behaviour of consumers is the objective of consumer behaviour.

The concept of Consumer behaviour seeks to find answers to why, where and how people purchase goods and services in the way they do and the underlying factors that influence such decisions made by consumers. Ramya & Mohammed-Ali (2016) have listed factors that determine buying behaviour of consumers to include; social factors, cultural factors, economic factors and personal factors.

The outbreak of the COVID-19 disease imposes on individuals not only the need to be concerned about their personal safety but raises cultural, social as well as economic implications on the buying behaviour of consumers and economic growth.

Theoretical Literature

A number of theories have been used to explain consumer behaviour and the factors that influence consumer spending with the earliest theory anchored on the desire for utility. These theories are basically an extension of postulations about human behaviour. This paper examines three approaches that are used to explain consumer behaviour.

Marshallian Utility Theory

One of the oldest approaches used to explain consumer behaviour is the theory of utility which proposes that consumers are rational, hence they are capable of making choices regarding the combinations of goods and services that maximizes their utility. This approach assumes that the consumer has full information on the consumption bundles at his disposal and could consistently order his preferences in such a manner that enable the realization of an optimum combination. Moreover, the theory assumes that self-interest is a core instinct of consumers therefore their consumption behaviour is driven by the desire to obtain maximum utility at minimum cost. The utility approach however fails the reality test as people are not in possession of adequate information, motivation or the luxury of time to make such a ‘perfect’ decision that ensure that their consumption bundles are always optimized. Moreover,

consumer decisions are often acted upon by less rational influences such as social relationships and values (Simon 1997). Accordingly, the application of the theory may be constrained in a pandemic outbreak especially in developing countries. Infact, the restrictions placed on movement of people and markets in the event of an outbreak of disease could limit the ability of people to attain the most optimum outcome.

Satisficing Theory of Consumer Behaviour

Simon (1956) propounded the satisficing theory to explain consumer behaviour. The theory asserts that consumer buying decision is bounded rational, hence people tend to make consumption decisions by satisficing rather than finding optimal combinations. The theory opines that given the cost of obtainingoptimal solutions, consumers would rather choose options that meet their basic criteria. That is, satisficing consumers opt for good enough combinations of goods and services and not necessarily the optimal choice in their decision making.The satisficing theory of consumer behaviour highlights the imperative of time in decision making in conditions where an optimal solution cannot be determined. In addition, it indicates the ability of satisficing consumers to change their consumption behaviour if current situations do not guarantee satisfactory outcomes in search of other satisficing alternatives.

Theory of Reasoned Action (TRA)

The theory of reasoned action was originated by Fishbein (1967) but reviewed and expanded by Ajzen and Fishbein (1980). The theory affirms that intention is a key determinant of individual behaviour and could predict why a person behaves in a certain way and at a specific time and place. In the TRA, an intention is like a plan or set of actions conceived by the individual that may/may not be executed. The TRA argues that intention to execute an action is a function of two important constructs, namely, attitude and subjective norms. That is, the attitude of the individual towards the behaviour (action) and the subjective norms of groups that could influence the attitude. Ajzen (1985) states that attitude towards a certain behaviour is influenced by beliefs about the outcome and evaluation of the eventual outcome. The attitude construct is an immediate antecedent that predicts an individual’s intention to

engage in certain behaviours. On the otherhand, subjective norms are shaped by the perceptions and beliefs of the social system to which the individual belongs. Subjective norms relate to how the individual perceives the beliefs of important people such as parents, friends and colleagues about the behaviour. Subjective norms are defined by the approval or disapproval of certain behaviour by important persons or groups and therefore act as an immediate antecedent to an individual's intention to engage in certain behaviour (Ajzen, 1991). It denotes the perception of the individual about social and group response to perform the behaviour.

The theory of reasoned action emphasizes the importance of understanding the attitude and norms that influence the intent to engage in certain consumption behaviours and has been applied in the numerous studies, includingconsumer brand loyalty (Lyong Ha, 1998) and health behaviour (Albarracin, Johnson. Fishbein and Muellerleille (2001).

Theory of Planned Behaviour (TPB)

The TPB is an extension of the theory of reasoned action. The theory adds one more factor to the theory of reasoned behaviour which is perceived behavioural control. Perceived behavioral control represents the presence of factors that may facilitate or impede the performance ofa behaviour of interest. It represents the individual's perception of the level of difficulty or ease in performing the required behaviour of interest (Redda, 2019). The TPB theory holds that attitude toward certain behaviour, subjective norm and perception of behavioral control are the formative blocks of behavioural intention. In this way, the more favourable these three factors are to a certain course of action, the stronger is the probability for an individual to behave accordingly. Moreover, since behavioural intentions significantly influences individual behaviour, the TPB predicts that the stronger an intention to perform a task, the greater the likelihood that the task will be performed by the individual. The TPB model has been used to investigate why people fail to adhere to COVID-19 preventive behaviours (Chan, Zhang, and Weman-Josefsson, 2020).

Empirical Literature

The outbreak of the coronavirus has reinforced the interest of scholars on the study of consumer behaviour in a pandemic situation.Asante and Mills (2020) explored the socio-economic impact of COVID-19 pandemic in market places in urban Ghana using descriptive analysis. The research indicated that Ghana's COVID-19 pandemic mitigation measures in marketplaces were focused mainly on disinfection of markets, enforcement of social distancing among traders, and imposition of partial lockdown to marketplaces. The study observed that due to the spatial, economic, and social micro-geographies of marketplaces in Africa, implementation of the containment measures will pose a challenge to government and leaders of market unions. The study notes that the enforcement of social distance measures in markets have impacted on the socio-economic conditions of traders in ways that includes, increased food prices, economic hardship, forceful relocation and decongestion of markets. Consequently, by extension, these have impacted on the level of income of traders and their consumption habits.

Kuruppu and De Zoysa (2020) studied the relation of COVID-19 and panic buying. The study utilized a quantitative approach. The findings indicated that excessive information (rumours and mis-information) circulated through social and news media outlets were significant determinants of consumer panic buying globally. The study noted that individual behaviour such as heuristic, availability heuristic, loss aversion, regret aversion, risk aversion, framing, hoarding, herding and band wagon effect contributed to panic buying in the early period of the pandemic.

Chronolopoulos, Lucas and Wilson (2020) investigated consumer spending responses to the COVID-19 pandemic in Great Britain. The study used transaction level dataset of 101, 059 people and 23 million transactions. The findings showed that discretionary spending declined prior to the announcement of lockdown measures by the government and had continued to decline during the lock down period. In addition, there was evidence of increase in spending on groceries consistent with panic buying and consumer stock piling behaviour in the two-weeks after the categorization of COVID-19 as a pandemic by the World Health Organisation. The study also observed that

differences in consumer spending exist across nations and regions, age, gender and income levels.

Bounie, Camara and Galbraith (2020) examined the relation of consumers' mobility, expenditure and offline substitution response to COVID-19 in France. Their study utilised transaction data for about 5 billion card transactions made in France. The sample period was divided into two frames: the first covering the time before the lockdown and the second representing the period of the lockdown imposed by the government of France. Their findings indicated that most consumers used their automated cards in less location and across a small number of retailers following the imposition of containment measures by the government. The study further observed that the decline in offline spending was twice the decline in online spending.

Chen, He, Hsieh and Song (2020) studied the economic effects of lockdown measures in China. The study which focused on the impact on Wuhan and Hubei province examined the monthly sales records of products of a major e-commerce platform. The outcome showed that there was a significant change in consumer behaviour in favour of food and groceries as against digital and electronic goods. Moreover, the study further showed that the impact of lockdown measures in the province on the movement of people and goods and on aggregates output was immediate and intense.

Chauhan and Shan (2020) investigated consumer sentiments, media consumption habits and consumer behaviour during the COVID-19 outbreak in India using frequencies and percentages as well as Analysis of Variance (ANOVA) approach. The study which focused on media consumption habit of Indians in the midst of the pandemic observed that spending decisions were the same across gender and there were significant differences in the size of consumption across age groups. In addition, the study further revealed that the level of discretionary spending had declined after the outbreak of the pandemic.

Allam, Abdelrhim and Mohammed (2020) examined the effects of the spread of the pandemic on investor trading behaviour in the Egyptian stock exchange. The analysis utilised daily cases, total cases, daily deaths and total deaths from COVID-19 in Egypt as independent variables and daily trade volume on the

Egyptian stock exchange as dependent variable. The data had a span of four months beginning from March 1- 30 June, 2020. The results indicated that the trading behaviour of investors was sensitive to the spread of the pandemic. In particular, the study observed that the behaviour of Egyptian investors continue to actively circulate unlike other Arab and foreign investors in the stock exchange.

Chen, Qian and Wen (2020) studied the impact of the COVID-19 pandemic on consumption behaviour using high frequency transaction data for China. The daily transaction data covered 214 cities and was collated for 12 weeks during the early period of the outbreak. The outcome of their analysis shows that consumption declined by an average of 32% across cities in China. Moreover, change in consumer consumption behaviour was more significant in heavily impacted cities such as Wuhan.

Edomah and Ndulue (2020) investigated the impact of containment measures in Nigeria on electricity consumption behaviour. The study utilised data representing 259 electrical feeder locations under three scenarios: normal period prior to lockdown, period of partial lockdown and during total lockdown. The study used Lagos as a case study. The findings show that aside the announcement of the lockdown by the government which impacted on electricity consumption behaviour of people, certain social practices further triggered changes in electricity consumption and use leading to momentary energy transition. These factors in the residential sector are increased cooking, home laundry and showering and professional practices that were moved to the home front. In the industrial sector, they include reduced use in food processing companies, personal care and pharmaceutical production.

Andersen, Hansen, Johannesen and Sheridan (2020) used transaction-level bank account data from a large Danish bank to examine consumer responses to the COVID-19 pandemic. The study found a decline in spending following the onset of COVID-19 in Denmark. Specifically, the study noted that that aggregate card spending declined by approximately 25% following the government shutdown. Moreover, the observed decline in spending is more concentrated on product categories where trading is restricted under the terms of the government shutdown.

Similar studies were also carried out by Hojin, Minjae and Kihoon (2016) in South Korea. Their study investigated the impact of an epidemic outbreak on consumer expenditure using scanner panel data on consumers' debit and credit card transactions. The outcome indicates that disease outbreak disrupts consumer expenditures as people are likely to alter their consumption behaviour to reduce the risk of infection. The authors observed that the estimated effects of an epidemic outbreak are qualitatively different from that of other macroeconomic factors.

In conclusion, there is an unending interest among scholars on the impact of COVID-19 on the behaviour of consumers and the economy. Moreover, the findings across countries have not been consistent, hence the relevance of this study.

Methodology

Study Area

The research area of study is the South-South region which is one of the six geo-political zones in Nigeria. The South-South region consists of Six (6) out of the 36 federating units in Nigeria and they are Akwa Ibom, Bayelsa, Cross River, Delta, Edo, and Rivers State. The region is ethnically diverse with a multiplicity of languages, though the people have significant similarities in culture, folklore and occupation. Consequently, the choice of the study area was informed by the need to examine the effects of COVID-19 on the behaviour of consumers in a region with historically connected traditions, lifestyle and occupation.

The traditional occupation of people in the region is predominantly farming and fishing. Large plantations are mostly owned by cooperatives and government. However, subsistence farming and fishing activities as practiced by rural dwellers continue to dominate agricultural practices in the region. Moreover, the main farm crops are cassava, yam, rice, plantain, maize, banana and palm produce, while mineral resources in the region include crude oil, lime stone, titanium, tin ore and ceramic raw materials.

Research Instrument

The study adopted the convenience sampling method to source for primary data. The primary data was based on an online survey directed to respondents using a structured questionnaire from March 13 to June 30, 2020 during the first four months of the outbreak of the pandemic that began in Nigeria on the 27th of February, 2020. The online survey instrument was administered through Google questionnaire forms. This online survey method is appropriate as it is a cost effective method of reaching a wide number of respondents in a pandemic period without increasing their risk of exposure to the virus.In addition, the online survey instrument was disseminated through various social media platforms including face book (https://www.facebook.com) and WhatsApp groups. The choice of these social media outlets was justified by its high number of users in Nigeria.

The questionnaire consisted of 23 one option and multiple questions structured in 5 sections: (1) Socio-demographic particulars (2) Awareness and key concerns about the pandemic (3) Consumption habits, and behavior of Nigerian consumers amid the coronavirus (COVID-19) outbreak. (4) Change in consumption pattern of households and (5) impact of COVID-19 consumer behaviour. The response of respondents to the research instrument was measured on a 5 point Likert scale anchored as Strongly Disagree (1) to Strongly Agree (5).

Participants

The population for this study comprises residents of the six (6) states in South-South Nigeria during the first four months (March-June) of the COVID-19 pandemic. The targeted population includes people with different educational background, occupation and marital status that engage in buying and selling activities. Furthermore, a total of 345 participants completely responded to the online questionnaire instrument out of the 379 responses received on the last day, 30th of June, 2020.

Validity and Reliability of the Research Instrument

A pilot test was conducted on 20 respondents from the sampled population for the purpose of establishing the validity of the research instrument before administering online to the targeted respondents. The results of the pilot test were used to correct vague questions noticed in the first draft. The content validity of the instrument was assessed by scholars in the Department of Economics, Federal University Otuoke. Moreover, the Cronbach Alpha was used to verify the internal consistency of the scale. It indicated a range of value between 0.65 to 0.74.

Method of Data Analysis

The study employed descriptive statistics in the analysis of the findings of the research. The objective is to draw inferences from the respondents' consumption behaviour. Moreover, the One-way ANOVA is used for the analysis of the data. The purpose of the ANOVA technique is to validate or invalidate the formulated hypotheses. The ANOVA technique was conducted to explore differences in change in consumption expenditure for medicine and food on consumer behavior across age groups andalso explore the differences in change in consumption habits and its impact on consumer behavior across different gender groups.

Results and Discussion

The questionnaire was collated and checked for completeness of response. Thereafter, the data was edited and coded to enable easy tabulation. The results are analysed in frequencies and percentages as presented in the following tables.

Table 2: Demographic Profile of Respondents

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	183	53.0	53.0	53.0
	Female	162	47.0	47.0	100.0
Agegroup					

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-24	56	16.2	16.2	16.2
	25-29	65	18.8	18.8	35.1
	30-34	60	17.4	17.4	52.5
	35-39	58	16.8	16.8	69.3
	40-44	76	22.0	22.0	91.3
	45-Above	30	8.7	8.7	100.0
	Total	345	100.0	100.0	

Source: Online Survey, 2020.

Accordingly, Table 2 indicates that 53.0% of the response to the online questionnaire was from male respondents while 47.0% were retrieved from female respondents respectively. This indicates that response to the online survey cuts across both gender groups and the size of the male respondents may be suggestive of the cultural setting which places economic responsibility of the household more on male folks. Moreover about 22.0% of the responses received were from people within the age bracket of 40-44 years. Also, 18.8% and 17.4% of the respondents were within the 25-29 and 30-34 respectively.

Table 3: Respondents Estimated Monthly Expenditure

Expenditure Groups (‘000)		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-49	148	42.9	42.9	42.9
	50-79	90	26.1	26.1	69.0
	80-109	76	22.0	22.0	91.0
	110-Above	31	9.0	9.0	100.0
	Total	345	100.0	100.0	

Source: Online Survey, 2020.

Table 3 shows the monthly expenditure estimate of respondents to the online questionnaire. The table indicates a dis-similarity in household monthly expenditure among the respondents. It shows that 42.9% of the respondents had monthly expenditure of not more than N49,000 while 26.1% and 22.0% spend between 50-79,000 and 80-109,000 monthly on consumption of goods and services.

Objective One: What is the level of awareness of people and their concerns as regards the outbreak of Covid-19?

The outbreak of the COVID-19 pandemic could affect the health and lifestyle of people given it is viral nature. The perception of respondents to the epidemic is indicated in Table 4.

Table 4: Respondents Perception of the COVID-19 Pandemic

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Aware &unconcerned	5	1.4	1.4	1.4
	Aware &skeptical	23	6.7	6.7	8.1
	Aware &very concerned	317	91.9	91.9	100.0
	Total	345	100.0	100.0	

Source: Online Survey, 2020.

Table 4 shows that most people are very concerned about the occurrence of the virus in Nigeria. The survey indicated that 91.9% of the respondents viewed themselves as very concerned about the effect of COVID-19 on their wellbeing. Also, 6.7% were aware but skeptical of information on the virus while 1.4% rated themselves as unconcerned. The findings thus show that most of the sampled population are not only aware of the outbreak of COVID-19 in Nigeria but are very concerned about its implications. Respondents also indicated that radio, television, Newspapers, NGO leaflets, social media, short message services and community town criers were avenues that generated their awareness of the virus.

Furthermore, the main concern of respondents as awareness of the effects of COVID-19 spreads in the country is as inferred in Figure 3. It indicates that majority of the sampled population wheremore concerned about the impact of the pandemic on their health, personal income and national economy. This finding is critical as it indicates that though the problem imposes a challenge to the health of people, permanent income level of households could be depleted especially for poor people given the lull in most sectors of the economy as a result of the pandemic.

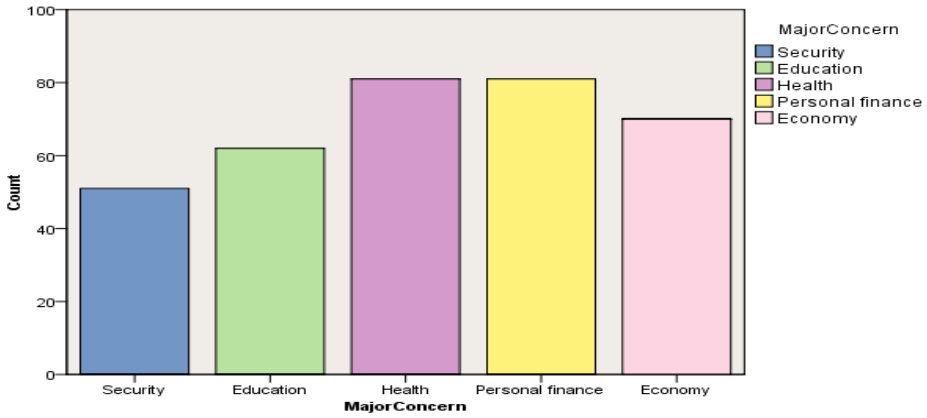


Figure 3. Areas of Major Concern to Respondents
Source: Online Survey, 2020.

Question Two: To what extent has the outbreak of COVID-19 affected household consumption habits?

The response of the sampled population to the question is indicated in figure 3. The diagram shows five areas of frequent activities in a household.

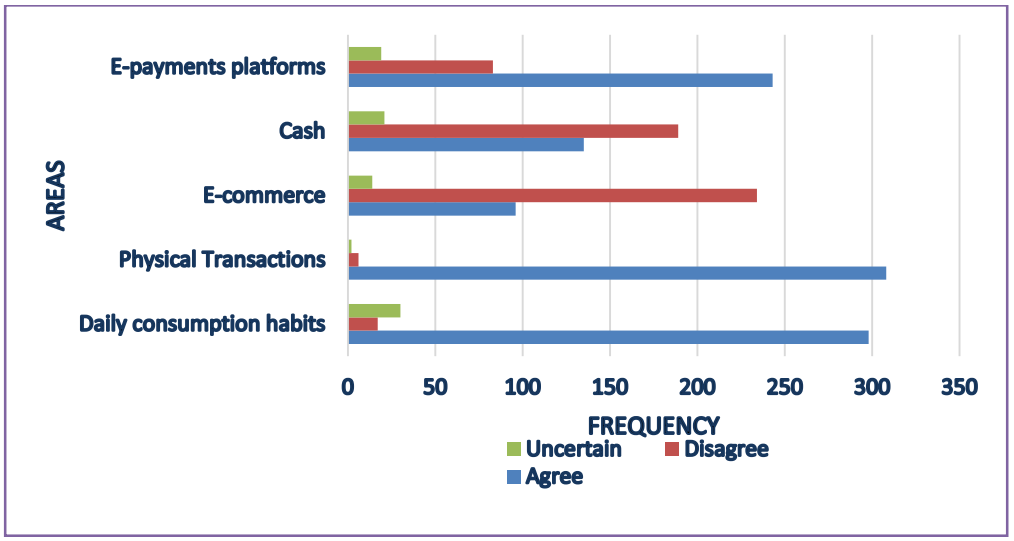


Figure 4. Perceived Changes in Consumption HabitsSource: Online Survey, 2020.

As inferred from figure 3, most respondents agree that their daily consumption habits have changed since the outbreak of the COVID-19 in the country. This may be related to the fact that the government restrictions compelled non-

essential workers and school children to remain at home. Hence, daily consumption habits of the household could likely be impacted. Physical transactions are still the prevalent mode used in consumption activities, though about 94 respondents affirm their use of e-commerce for shopping in the period of COVID-19.Furthermore, most respondents rely on e-payment platforms (debit card, credit card, bank mobile sort codes, etc.) than cash to make payments for their purchase of goods and services. This outcome could be due to the need to reduce physical contact and maintain social distance which e-payment promotes better than physical cash transactions. Moreover, the use of cashless methods eases payments for transactions that are large in volume and reduces the time required for handling cash.

Question Three: What is the buying behaviour of consumer in the COVID-19 period?

Table 5: COVID-19 and Percentage of Increase in Respondents Buying Behaviour

Goods & Services	**0-35%**	**36-70%**	**71% or more**	**Uncertain**
Food & Groceries	53	72	220	0
Electricity (Gasoline)	132	168	42	3
Medicine	84	109	146	6
Pay Television	98	188	46	12
Fitness & Well	76	53	21	195
Social Media	104	126	78	37
Sanitizers and Agents	117	178	45	5
AVERAGE	**94.857**	**127.714**	**85.429**	**36.857**

Source: Online Survey, 2020.

Table 5 shows the response of the respondents to the question pertaining buying behaviour in the midst of the COVID-19 pandemic. The table indicates that 53 respondents assert their expenditure on food and groceries has increase about 35% while 220 respondents observedan increase not below 70%. Moreover, 109 respondents believed that spending on medicine has increased between 36-70% and 6 were uncertain as to the percentage increase in their medical expenditures. Social media expenditures have also increased to about 0-35% for 104 respondents and 36-70% for 126 respondents. The social media

is a veritable platform for information and communication for most people. Hence, the increase in spending could be attributed to the need to not only stay inform but propagate positive energy among friends and family members using the communality afforded by the social media in the midst of COVID-19. On the average, 95, 128 and 85 respondents believed that their spending on goods and services have increased by 0-35%, 36-70% and 70% or more respectively. The increase in spending for food, medicine, sanitizers, etc. may be due to the need to stock essential goods for household use in anticipation ofunforeseen circumstances. However, this could be unsustainable for poor households in the long run and erode their savings.

Question Four: Is their difference in consumption expenditure across age group and gender due to COVID-19?

The Analysis of Variance (ANOVA) was used to ascertain whether there are differences in the increase in consumption expenditure on medicine and food across age groups.

Table 6: ANOVA[a]

Medicine

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	87.756	2	43.878	4.838	.008
Within Groups	3101.797	342	9.070		
Total	3189.554	344			

Table 7: ANOVA[b]

Food

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	17.710	2	8.855	5.119	.007
Within Groups	219.682	127	1.730		
Total	237.392	129			

Table 8: ANOVA[c]

Gender

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3595.958	5	719.192	1.268	.277
Within Groups	192247.503	339	567.102		
Total	195843.461	344			

An analysis of Tables 6 and 7 indicates that the F-value is greater than the "Sig" value (4. 838> 0.008, 5.119>0.007) and the latter is less than 0.05. Thus, indicating that significant difference exist in medicine and food consumption across the age groups.This could be attributed to the fact that older and married household heads were more likely to spend more on food and medicine than younger and single individuals. More so, the income level of families may be a significant determinant of the differences in spending across the age groups. Moreover, Table 8 indicates that there are no significant differences in the increase in spending across gender since the "Sig" value is less than 0.05 ($p<0.277$). This indicates that the increase in consumption expenditure levels for both male and females have been more or less the same as a result of the pandemic.

Conclusion and Recommendations

The study was carried out to examine the impact of a pandemic outbreak on consumer behaviour in Nigeria. The extant literature in consumer demand has considered consumer consumption as a vital component of aggregate demand and an ingredient in economic growth and development of any nation. Nevertheless, for this to happen, the behaviour of the consumer must be such that further the growth of demand for goods and services.

Based on the analysis, the following findings are made:

1. Nigerians are aware of the outbreak of COVID-19 in the country and most of them are very concerned about its impact on their lifestyle and welfare. The major areas of concern expressed by people are on health, personal finance, economy, education and security.

2. There are significant changes in the pattern of consumer spending since the outbreak of the pandemic. Daily consumption habits of people have been impacted. Moreover, e-payment rather cash is predominantly used by people while physical transactions are preferred to e-commerce.

3. The outbreak of COVID-19 has caused an increase in consumer spending for food, medicine gasoline and sanitizers beyond previous levels.

4. There are significant differences in the rise in spending amongst age groups for food and medicine. However, overall analysis of the expenditure across gender indicates that the differences are not significant. Hence, there is a similar change in expenditure levels for gender.

In general, the study observed that there is a high level of awareness and concern of the citizenry on the outbreak of COVID-19 in the country. Also, there is a change in consumer behaviour and shifts in the spending patterns of most households due to the pandemic with increased usage of medical products and services, food purchases and cashless transactions.

Policy Recommendations

Based on the findings, the following recommendations are proffered:

1. There is the need for the government and major stakeholders to sustain all efforts geared towards generating awareness of the serious implications of the pandemic on health of individuals. This could heighten concern of individuals on the implications of the virus and increase adherence to social distance measures advocated by the government.
2. The government should use its monetary policy measures to deepen interest in e-commerce and e-pay methods and open up the space for more investment in the financial technology sector. In addition, efforts should be made to improve the nations' poor digital infrastructure and expand its reach especially to people in the rural areas. Furthermore, social investment projects and cash transfer to poor people should be employed by the government to sustain the momentum in demand for consumption goods occasioned by the pandemic.
3. It is equally important that the government in recognition of the rise in demand for health products and services by citizens in this period should

utilize the opportunity to increase investment in the health sector of the country. This could be done through sustained 15% budgetary allocation to the health sector as advocated by World Health Organisation. Moreover, ease of access to food by households should be encouraged to reduce hardship that may occur as a result of scarcity and inflation.

4. Lastly, government monetary policy measures should favour imposition of lesser burdens on households through reduction of interest rates and subsidizing credit to small businesses. Furthermore, cash transfers that target poor households and social investment project should be encouraged to sustain consumption of activities and keep businesses afloat in the economy.

References

Ajzen, I.& Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour.*Prentice Hall.

Ajzen, I. (1985). From intentions to actions: A theory of planned behaviour. In*K. Julius & B. Jurgen (Eds.), Actions:*From cognition to behaviour(2ed., pp. 11-39). Springer.

Ajzen, I. (1991). The Theory of Planned Behaviour. *Organisational Behaviour and Human Decision Process, 50*(20), 179-211.

Albarraccin, D., Johnson, B., Fishbein, M., & Muellerleile, P. (2001). Theories of Reasoned Action & Planned Behaviour as Models of Condom Use: A Meta Analysis. *Psychological Bulletin,127*(1), 142-161.

Elsayed, A. & Elrhim, M. A. (2020). The Effect of the COVID-19 Spread on Investor Trading Behaviour on the Egyptian Stock Exchange. *SSRN electronic Journal*.http://doi.org/10.2139/ssrn.3655202

Andersen, A., Hansen, E.T., Johannsen, N., & Sheridan, A. (2020). Consumer responses to the COVID-19 Crisis: Evidence from bank account transaction data. *Covid Economics*, 7, 88-114.

Asante, L.A.,& Mills, R.O. (2020). Exploring the Socio-Economic Impact of COVID-19 Pandemic in Market Places in Ghana. *Africa Spectrum*. https://doi.org/10.1177/000203972094361

Bounie, D., Camara, Y., & Galbraith, J.W. (2020). Consumer's Mobility Expenditure and Online-Offline Substitution Response to COVID-19: Evidence from French Transaction Data. *Retrieved from https://ssrn.com/abstract=3588373*.

Centers for Disease Control and Prevention (2020). Coronavirus disease 2019. Retrieved from http://www.cdc.gov

Chan, D.K.C., Zhang, C-Q., & Weman-Josefsson, K. (2020). Why people failed to adhere to COVID-19 preventive Behaviours? *Infection Control Hospital Epidemiology*.doi.org/10:1017/ice.2020.245.

Chauhan, V.,& Shah, M. H. (2020). An empirical analysis into sentiments, media consumption habits and consumer Behaviour during the Coronavirus (COVID-19) Outbreak. *UGC Care Journal*, 31(20), 353-378.

Chen, Q., He, Z., Hsieh, C-T., & Song, Z. (2020). Economic Effects of Lockdown in China. The Chinese University of Hong Kong and Tsighua university Joint Research Center for Chinese Economy, *COVID-19 Thematic Report No. 2*.

Chen, Q., Qian, W., & Wen, Q. (2020). The impact of the COVID-19 pandemic on consumption: Learning from high frequency transaction data. *Retrieved from https://papers.ssrn.com/801/papers.cfm?abstract id=3579423*.

Chronopoulos, D.K., Lukas, M., & Wlison, J.O.S. (2020). Consumer spending responses to the COVID-19 pandemic: An assessment of Great Britain. *Center for Responsible Banking and Finance, Working Papers Series in Responsible Banking and Finance*, 3rd Quarter Report, 1-40.

Edomah, N.,& Ndulue, G. (2020). An analysis of the impact of COVID-19 on changes in electricity demand in Lagos, Nigeria. *Global Transactions*, 2, 127-137.

Food and Agricultural Organisation (2016). The State of Food and Agriculture: Climate change, agriculture and food security. Retrieved from www.fao.org/publications

Fishbein, M. (1967). A Behaviour theory Approach to the Relations between Beliefs about the Object and the Atitude towards the Object. In M. Fishbein (Ed.), *Readings in Attitude Theory and Measurement* (pp. 389-400). John Wiley & Sons.

Hojin, J., Minjae, P., Kihoon, H., & Eunjung, H. (2016). The impact of an epidemic outbreak on consumer expenditure: An assessment of MERS in Korea. *Sustainability*, *8*(5), 454-472.

Kelly, H. (2010). The classical definition of a pandemic is not elusive. *Bulletin of the World Health Organisation*, *89*, 540-541.

Kuruppu, G.,& De Zoysa, A. (2020). COVID-19 and panic buying: An examination of the impact of behavioural Biases. Retrieved from https://ssrn.com/abstract=3596101.

Lyong Ha, C. (1998). The theory of reasoned action applied to brand loyalty. *Journal of Product and Brand Management*, *7*(1), 51-61.

Nigeria Centre for Disease Control (2020). Weekly Epidemiological Reports. Abuja, Nigeria: NCDC.

Ramya, N., & Mohammed-Ali, S.A. (2016). Factors affecting consumer buying behaviour. *International Journal of Applied Research*, *2*(10), 76-80.

Redda, E. (2019). Atttudes towards online shopping application: Application of the theory of planned behaviour. *ACTA Universitatis Danubuis*, *15*(2), 148-159.

Rima, S. (2020). The economic impact of COVID-19. Retrieved from https:www.tropicalmedicine.ox.ac.uk

Shereen, M.A., Khan, S., Kazmi, A., Bashir, N.,& Siddique, R. (24). COVID-19 infection: Origin, Transmission and Characteristics of Human Coronaviruses. *Journal of Advanced Research*, doi.org/10.1016/j.jare.2020.03.005.

Simon, H. (1956). Rational Choice and the Structure of the Environment. *Psychological Review*, *63*(2), 129-138.

Simon, H. (1997). *Administrative behaviour: A Study of decision making process in administrative organisations.*(4th. Ed.). The Free Press.

Solomon, M. R. (2009). Consumer behaviour: Buying, Having and Being. (8th. Ed.). Pearson Education.

World Bank (2020). *Nigeria in times of COVID-19: Laying foundations for a strong recovery.* Nigeria Development Report, New York: World Bank.

World Health Organisation (2020). Coronavirus disease (COVID-19) dashboard. Retrieved from www.covid19.who.int

Wikipedia (2019). Coronavirus disease 2019. Retrieved from www.en.m.wikipedia.org

World Health Organisation (2020). Coronavirus Disease Dashboard. Retrieved from https://covid19.who.int