Trends of Consumer Purchase Behavior During the COVID-19 Pandemic in Nigeria

Nyitor Alexander Shenge [a,*], Fiyinfunjah Adenike Dosunmu [b],

Timilehin Fashola [c]

[a,c] *Department of Psychology, University of Ibadan, Professor*
[b] *Lagos Business School, Lagos State, Nigeria*

ARTICLE INFO

ABSTRACT

Worldwide, the COVID-19 pandemic is affecting the patterns of consumer purchase behavior. In this paper, trends in the purchase behavior of Nigerian consumers were investigated. Descriptive research design was adopted, and data were gathered from 112 online respondents across different states in Nigeria. More of the respondents 70 (62.5%) indicated to be males, while the other 42 (37.5%) were females. Also, more of the respondents 40 (35.7%) were professionals in their line of work, 33 (29.5%) render services, 20 (17.9%) were business owners, 11 (9.8%) were students, 2 (1.8%) were home makers, an individual (0.9%) indicated to be retired, while the other 5 (4.5%) were into other occupations outside the listed ones. Findings revealed that when combined, age, family income, educational qualification, family size (adult & children) and number of employed family members predicted consumer purchase behaviour [R = .37; R2 = .14; F (6, 105) = 2.82; P<.05]. Collectively, age, family income, educational qualification, family size (adult & children) and number of employed family members accounted for about 14% variance in consumer purchase behaviour. However, only family size in terms of children independently predicted consumer purchase behaviour (β = .21; t = 2.10; P<.05). Recommendations were made based on the findings of the study.

Journal of Marketing Management and Consumer Behavior

*Corresponding Author:
alex71851@yahoo.com

Introduction

The coronavirus pandemic forced a lockdown on many countries in 2020, Nigeria inclusive. In Nigeria, a lockdown was enforced in March 2020 in the states most affected by the COVID-19 pandemic. Prior to the lockdown, a 48-hour notice was given for citizens to prepare for the lockdown by stocking their home with items that will be most needed during the lockdown. In this paper, we seek to examine the trends of consumer purchase behavior during the COVID-19 pandemic.

Previous studies have examined consumer decision systems. Cheung et al. (2014) examined social factors that affect consumer purchase decisions. The researchers found that action based social information affected consumer purchase decisions more than opinion based social information. This means that consumers are more likely to purchase a product when a peer has bought the product. During the coronavirus pandemic, consumers had a sense of potential scarcity and many people bought a lot of non-essential needs because a friend or peer has bought it. Sometimes, social information about potential scarcity of a consumer good may also influence purchase decisions. For example, news about scarcity of toilet papers made people buy more toilet papers than they would need during the COVID-19 lockdown.

Hashem (2020) investigated the influence of COVID-19 pandemic in changing consumers' orientation towards E-shopping in Jordan. Through simple random sampling, the study gathered data from 500 participants and unraveled that COVID-19 pandemic managed to change consumers' behaviour before and after the pandemic.

Pathak and Warpade (2020) examined the impact of lockdown due to COVID-19 on consumer behaviour while selecting retailers for essential goods in India. Data was gathered from 172 Indians and it was discovered that consumers changed their preference while selecting retailers for shopping of essential goods. Also, it was found that for grocery items, FMCG products and bakery items customer has changed their preference.

Loxton, Truskett, Scarff, Sindone, Baldry and Zhao, (2020) examined consumer behaviour during crises. The study was a preliminary research on how coronavirus has manifested consumer panic buying, herd mentality, changing discretionary spending and the role of the media in influencing behaviour. It was discovered that consumer behaviour during the COVID-19 crisis was similar to consumer behaviour exhibited during historic crisis events, characterized by panic buying of household needs.

Charlebois (2020) unraveled why the COVID-19 will change Canadian grocery industry. It was discovered that there was huge amount of movement to online grocery shopping especially by retirees and households that have not originally purchased groceries from home. In addition, Jahangir (2020) unraveled buying behaviour under corona virus disease pandemic situation. It was reported that health and other daily needs ranked highest among what was most purchased.

The COVID-19 pandemic may also introduce cognitive perceptions about what is luxury ad what is not. Consumers purchase luxury items as it gives them feelings of self-pleasure and uniqueness among others (de Barnier et al., 2006). The luxury perception of consumers during the COVID-19 pandemic is however worthy of exploration.

Technology has enhanced online consumer behavior before the COVID-19 pandemic, the pandemic may however further intensify how people purchase goods online especially during the lockdown. Yasav (2015) analyzed the impact of digital technology on consumer purchase behavior and found that consumers now rely heavily on technology when making purchases. Thus, people may consider online purchase options more than physical visit to stores during the COVID-19 pandemic.

In this study, we examine the trends in consumer purchase behavior as a result of the COVID-19 pandemic. To the best of our knowledge, no study has explored the patterns of purchase behavior of consumers in Nigeria. We seek to contribute to the theory on consumer purchase decision systems and practice of consumer psychology.

Theoretical Framework

Our study draws on the theory of planned behavior (Ajzen, 1991) which states that behavior is based on intentions. The theory posits that individual values are used to form attitudes towards a behavior. Before individuals make purchasing decisions, they consider their personal, social, and economic values. Relating this to consumer purchase behavior during the COVID-19 pandemic, consumers may make purchases only when they believe these products are of value to them especially during the lockdown where movement is restricted. Consumers will thus purchase products that they intend to buy. In this study, we consider how the theory of planned behavior applies to consumer purchase behavior during the COVID-19 pandemic.

Objectives

i. To unravel the trends of products purchased in preparation for lockdown during COVID-19 pandemic;

ii. To examine the socio-demographic determinants of consumer purchase behaviour during COVID-19.

Method

This section presents the research method procedure adopted for the study. The following outline were covered; design, participants, research instrument and procedure, and data analytic technique.

Design

Research design refers to the general strategy that is adopted in an empirical research. The design gives a detailed direction and step-by-step approach to follow in order to achieve the set research question/objectives (Ivankova, Creswell & Stick, 2006). It further comprises of the blueprint for the collection, setting, population, participants/sampling technique, instrument and data analytic technique. In this study, descriptive survey research design was adopted. This is because the design was able to give detailed information as regards the trend of consumer purchase behaviour during the outbreak of COVID-19.

Participants

The study participants included Nigerians, who were resident in Nigeria during the outbreak of COVID-19. Data were gathered through an online survey, using Google form. Over one thousand five hundred potential respondents were reached online to complete the questionnaire. However, due largely to the emergency situation arising from the COVID-19 lock down, only 112 respondents actually completed and submitted the questionnaire.

Materials & Procedure of Data Gathering

The data collection material comprised of well-structured questionnaire. This was divided into two major sections. Section A comprised of socio-demographic information of respondents. This includes; gender, age, educational qualification, occupation, family income, marital status, family size (adult and children), number of family members employed and location of residence.

Section B contained items adapted from various existing scales of measurement developed by different authors to achieve the objectives of the study. Three (3) item post-purchase intention scale developed by Cronin, Brady and Hult (2000) was adapted in this study. The response

format ranged on a 9-point scale. Also, consumer behaviour questionnaire, developed by Madhavan (2015). In addition, customer post-purchase intention scale developed by Kuo, Wu and Weng (2009) was also adapted to the study. After a pilot study, the internal consistency for the designed instrument ranged between 0.869 and 0.903.

Designed instrument was arranged on an online survey (Google form). The link to the survey was distributed via E-mails, WhatsApp platforms as well as other online social website. Data were gathered within early April and early May, 2020, marking a month after the lockdown due to COVID-19.

Analysis

Gathered data were analyzed using Statistical Package for Social Sciences (SPSS). Both descriptive and inferential statistics were utilized in analyzing the gathered data. Descriptive statistics such as simple frequencies, percentages and Chi-Square analysis were used to analyze the demographic factors as objective one. Objective two was tested using multiple regression analysis.

Results

This section presents results of gathered data on the trends of consumer purchase behaviour during COVID-19 pandemic in Nigeria.

1. Socio-Demographic Distribution

This section presents results of demographic information of respondents.

Table 1: Demographic Distribution

Variable	Frequency	Percentage (%)
Gender		
Male	70	62.5
Female	42	37.5
Age		
Less than 20 years	5	4.5
20-30 years	41	36.6
31-40 years	27	24.1
41-50 years	18	16.1
51-60 years	18	16.1
Above 60 years	3	2.7
Educational Qualification		
SSCE	6	5.4
A-Level	4	3.6
Still studying	30	26.8
Graduate	60	53.6

Postgraduate	9	8
Professional	3	2.7
Marital Status		
Married	55	49.1
Single	53	47.3
Separated	1	0.9
Divorced	3	2.7
Total	**112**	**100**

Table 1 presents results on frequency distribution according to socio-demographic information of respondents. It is shown that more of the respondents 70 (62.5%) indicated to be males, while the other 42 (37.5%) were females. As regards age distribution, more of the respondents 41 (36.6%) were between 20 and 30 years old, 27 (24.1%) were between 31 and 40 years old, 18 (16.1%) were between 41 and 50 years, another 18 (16.1%) were between 51 and 60 years, 5 (4.5%) indicated to be less than 20 years old, while the other 3 (2.7%) indicated to be above 60 years of age.

Educational qualification revealed that more of the respondents 60 (53.6%) were graduates, 30 (26.8%) were still studying, 9 (8%) were postgraduates , 6 (5.4%) were SSCE certificate holders, 4 (3.6%) were A-level certificate holders, while the other 3 (2.7%) were professional certificate holders. According to marital status, more of the respondents 55 (49.1%) indicated to be married, 53 (47.3%) were single, 3 (2.7%) were divorced, while the other individual (0.9%) indicated to be separated.

Table 2: Socio-Economic Distribution of Respondents

Variable	**Frequency**	**Percentage (%)**
Occupation		
Service	33	29.5
Business	20	17.9
Professional	40	35.7
Home maker	2	1.8
Retired	1	0.9
Student	11	9.8
Others	5	4.5
Family Income		
Less than N10,000	2	1.8
N10,001-N30,000	13	11.6
N30,001-N50,000	16	14.3
N50,001-N100,000	22	19.6
Above N100,000	59	52.7
Family size (Adult)		
Less than 3	69	61.6
Above 3	43	38.4

Family size (Children)		
Less than 3	81	72.3
Above 3	31	27.7
Employed family members		
Less than 3	34	30.4
4-6 members	75	67
Above 6	3	2.7
Residence (Geo-politically)		
North-central	33	29.5
North-west	2	1.8
South-South	4	3.6
South-west	65	58
South-East	6	5.4
North-East	2	1.8
Total	**112**	**100**

Table 2 presents results on frequency distribution according to socio-economic distribution. It is shown that more of the respondents 40 (35.7%) were professionals in their line of work, 33 (29.5%) render services, 20 (17.9%) were business owners, 11 (9.8%) were students, 2 (1.8%) were home makers, an individual (0.9%) indicated to be retired, while the other 5 (4.5%) were into other occupations outside the listed ones. Family income frequency showed that more of the respondents 59 (52.7%) indicated that they earn above N100,000 every month, 22 (19.6%) earn between N50,001 and N100,000 every month, 16 (14.3%) earn between N30,001 and N50,000 every month, 13 (11.6%) earn between 10,001 and N30,000 every month, while the other 2 (1.8%) indicated that they earn less than N10,000 every month.

From Table 2 as well, it is shown that more of the respondents 69 (61.6%) indicated that there are less than 3 adults in their family, while the other 43 (38.4%) indicated that there are 3 and above number of adults in their family. As regards number of children in the family, more of the respondents 81 (72.3%) indicated that there are less than 3 children in the family, while the other 31 (27.7%) indicated that there are 3 and above number of children in the family.

When asked how many family members were employed, more of the respondents 75 (67%) indicated between 4 and 6 members of the family were employed, 34 (30.4%) indicated that less than 3 family members were employed, while the other 3 (2.7%) signified that over 6 family members were employed.

Finally as regards location of residence, more of the respondents 65 (58%) indicated to be residing in south-western part of Nigeria, 33 (29.5%) resides in north-central part of Nigeria, 6 (5.4%) resides in south-eastern part of Nigeria, 4 (4.6%) resides in south-south part of Nigeria, 2 (1.8%) resides in North-western part, while the other 2 (1.8%) indicated that they resides in North-eastern part of the country.

2. Trends of products purchased in preparation for lockdown during COVID-19 pandemic;

Table 3: Trends of products purchased a month before lockdown

Items	Gender				
Provisions	**Male**	**Female**	**Total**	X^2	P
Occasionally	18	8	26		
Regularly	27	13	40	2.23	>.05
Very frequently	25	21	46		
Home Decorator					
Occasionally	46	32	78		
Regularly	20	5	25	4.93	<.05
Very frequently	4	5	9		
Personal protective items against CV-19					
Occasionally	34	20	54		
Regularly	30	17	47	.34	>.05
Very frequently	6	5	11		
Food & Drinks					
Occasionally	8	3	11		
Regularly	23	19	42	1.89	>.05
Very frequently	39	20	59		
Fruits & Vegetables					
Occasionally	7	1	8		
Regularly	28	21	49	2.76	>.05
Very frequently	35	20	55		
Personal hygiene products & cosmetics					
Occasionally	32	10	42		
Regularly	24	24	48	6.57	<.05
Very frequently	14	8	22		
Internet & Telecommunications					
Occasionally	13	7	20		
Regularly	21	18	39	1.97	>.05
Very frequently	36	17	53		
Medicines & Vitamins					
Occasionally	28	14	42		
Regularly	20	18	38	2.42	>.05
Very frequently	22	10	32		
Financial Services					
Occasionally	40	22	62		
Regularly	18	12	30	.24	>.05
Very frequently	12	8	20		
Entertainment					

Occasionally	34	23	57		
Regularly	23	13	36	.51	>.05
Very frequently	13	6	19		
Apparel & Accessories					
Occasionally	46	28	74		
Regularly	18	6	24	3.91	>.05
Very frequently	6	8	14		
Total	**70**	**42**	**112**		

There are various products and services that are of benefit for human beings. Through a qualitative research, the study was able to identify the following 11 most commonly needed products and services by human; provisions, home decoration, personal protective items against COVID-19, foods and drinks, fruits and vegetables, personal hygiene products & cosmetics, internet and telecommunications, medicines and vitamins, financial services, entertainment, apparel and accessories.

It is shown on Table 3 that more of the respondents 46 (41.1%) indicated that the purchased provision very frequently a month before lockdown, 40 (35.7%) purchases provisions regularly, while the other 26 (23.2%) occasionally purchased provisions a month before COVID-19 lockdown.

As regards home decoration materials and utilities, more of the respondents 78 (69.6%) occasionally purchase home decoration and utilities, 25 (22.3%) regularly purchased home decorations and utilities, while few number of respondents 9 (8%) purchases home decorations and utilities very frequently a month before COVID-19 lockdown.

Further, it is shown that more of the respondents 54 (48.2%) indicated that they occasionally purchased personal protective items against COVID-19. More than half of the respondents 52.7% indicated that they purchased food and drinks very frequently a month before COVID-19 lockdown. Also, more of the participants 49.1% indicated that they purchase fruits and vegetables very frequently a month before lockdown.

As regards personal hygiene products and cosmetics, more of the respondents 48 (42.9%) indicated that they regularly purchased such products a month before COVID-19 lockdown. Further, more of the respondents 53 (47.3%) purchased internet and telecommunications very frequently a month before lockdown.

In addition, as regards medicines and vitamins, more of the respondents 37.5% indicated that they occasionally purchased medicines and vitamins, 38 (33.9%) indicated they purchased

such products regularly, while the other 32 (28.6%) purchases such products very frequently. More of the respondents 55.4% and 50.9% indicated that they occasionally patronized financial and entertainment services respectively, a month before COVID-19.

Further, almost all of the respondents 66.1% indicated that they occasionally patronized apparel and accessories a month before COVID-19 lockdown.

3. Socio-demographic determinants of consumer purchase behaviour during COVID-19

Demographic factors will significantly predict consumer behaviour during COVID-19. This was tested using multiple regression analysis and the result is presented on Table 4;

Table 4: Multiple Regression Analysis Summary Table Showing Predictors of Consumer Behaviour

Criterion	Predictors	β	t	P	R	R²	F	P
	Age	.09	.79	>.05				
	Edu_qual	.11	1.09	>.05				
Consumer Behaviour	Fam income	.17	1.67	>.05	.37	.14	2.82	<.05
	Fam size (adult)	.03	.30	>.05				
	Fam size (children)	.21	2.10	<.05				
	Employed fami siz	-.06	-.55	>.05				

Table 4 presents results on the predictors of consumer behaviour during a month before and during COVID-19 lockdown. The predictors includes; age, family income, educational qualification, family size (adult & children) and number of employed family members. It is shown that when combined, age, family income, educational qualification, family size (adult & children) and number of employed family members predicted consumer purchase behaviour [R = .37; R² = .14; F (6, 105) = 2.82; P<.05]. Collectively, age, family income, educational qualification, family size (adult & children) and number of employed family members accounted for about 14% variance in consumer purchase behaviour. However, only family size in terms of children independently predicted consumer purchase behaviour (β = .21; t = 2.10; P<.05).

Discussion & Conclusions

The study investigated trends of consumer purchase behaviour during COVID-19 pandemic in Nigeria. This was also a period when there were deliberations as regards whether to enforce a national lockdown or not. During this period, it was proposed that there might be increase in purchase of items that are on daily demands such as; foods, drinks, fruits, vegetables and other consumables, including internet and telecommunications services. It was

discovered from the findings that there was increase in the purchase of daily needs such as foods, drinks, fruits, vegetables, internet and telecommunications services and other daily consumables. This was made apparent as respondents indicated that they purchased these identified products very frequently a month before lockdown or partial lockdown in various states in Nigeria.

Also, it was discovered that collectively, age, family income, educational qualification, family size (adult and children) and number of employed family members accounted for about 14% variance in consumer purchase behaviour. However, only family size in terms of children independently predicted consumer purchase behaviour. This implies that during COVID-19 pandemic, most consumer behaviour was informed by the family size, especially the children in the family. This might have informed the results that showed that food, drinks, vegetables and fruits ranked highest among what was most purchased during COVID-19 pandemic.

Similarly, Sucharita (2020) investigated the impact of COVID-19 on consumer purchase behaviour in the retail sector. It was discovered that monthly income and age were significant determinants of consumer behaviour during COVID-19 pandemic. Also, Charlebois (2020) unraveled why the COVID-19 will change Canadian grocery industry. It was discovered that there was huge amount of movement to online grocery shopping especially by retirees and households that had not originally purchased groceries from home. In addition, Jahangir (2020) unraveled buying behaviour under corona virus disease pandemic situation. It was reported that health and other daily needs ranked highest among what was most purchased.

Recommendations

From the findings, it is recommended that marketers as stakeholders in the Fast Moving Consumables Goods (FMCG) industry should be regulated such that the market forces that would trigger increase in price of commodities will be regulated. Nigerian agency in charge of price regulation of consumable goods especially should count it a point of duty to ensure that there is no arbitrary increase in prices of commodities. This will further make life more convenient for citizens.

To manufacturers, it is recommended that more employees should be recruited in order to meet the daily demands of goods due to the pandemic which is yet to leave humanity. This will increase the production as well as profit making for the company.

To consumers, this study recommends that when similar event occurs in the future, there should be effort to have the consciousness as regards setting priorities on what to purchase and what not to buy. In other words, there should not be panic buy of certain types of products or services. Exhibiting high level of panic buy will only increase the price of commodities, which follows the economic rule of 'the higher the demand, the higher the price'.

In addition, this study recommends that efforts should be made by manufacturers especially in the FMCG industry to invest more on having buildings and other resources that will help in preserving goods against similar situations in the future.

Finally, this study recommends that more studies should be carried out on other factors that could contribute to consumer behaviour during and post COVID-19. This will help make more robust recommendations.

References

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes 50(2), 179–211.

Charlebois, S. (2020, March 26). Why COVID-19 will change Canadian grocery industry forever: Expert. Retail Insider. (https://www.retail-insider.com).

Cheung, C. M. K., Xiao, B. S., & Liu, I. L. B. (2014). Do actions speak louder than voices? The signaling role of social information cues in influencing consumer purchase decisions. Decision Support Systems, 65, 50-58.

Cronin, J., Brady M.K & Hult T.M., (2000). Assessing the Effects of Quality, Value, and Customer Satisfaction on Consumer Behavioral Intentions in Service Environments. Journal of Retailing, 76, 193-218.

de Barnier, V., Rodina, I., & Valette-Florence, P. (2006). Which luxury perceptions affect most consumer purchase behavior? A cross cultural exploratory study in France, the United Kingdom and Russia. Proceedings des Congrés Paris-Venise des Tendences Marketing, 8, 7.

Hashem, T.N., (2020). Examining the Influence of COVID-19 Pandemic in Changing Consumer's orientation towards E-shopping. Modern Applied Science, 14, 59-76.

Ivankova, N., Creswell J. & Stick S., (2006). Using Mixed-Methods Sequential Explanatory Design: From Theory to Practice. Fields Methods, 18, 3-20.

Jahangir, A., (2020). Buying Behavior Under Coronavirus Disease (COVID-19) Pandemic Situation: A Online Perspective Case in Bangladeshi Shoppers. Chinese Business Review, 19, 82-90.

Kuo, Y., Wu C. & Deng W., (2009). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. Computers in Human Behaviour, 25, 887-896.

Loxton, M., Truskett R., Scarff B., Sindone L., Baldry G. & Zhao Y., (2020). Consumer Behaviour during Crises: Preliminary Research on How Coronavirus Has Manifested Consumer Panic Buying, Herd Mentality, Changing Discretionary Spending and the

Role of the Media in Influencing Behaviour. Journal of Risk & Financial Management, 13, 1-21.

Madhavan, M., (2015). Consumer buying behaviour: An overview of theory and models. St. Theresa Journal of Humanities & Social Sciences, 1, 74 - 112.

Parthak, G. & Warpade S., (2020). Impact of lockdown due to COVID-19 on consumer behaviour while selecting retailer for essential goods. Zeichen Journal, 6, 282-289.

Sucharita, D., (2020). Impact of COVID-19 on consumer purchase behaviour in retail sector. UGC Care Journal, 31, 103-115.

Yasav, S. (2015). The impact of digital technology on consumer purchase behavior. The Journal of Financial Perspectives: FinTech, 3(3), 1-10.