



EFFECT OF COVID-19 ON EDUCATIONAL SYSTEM IN NIGERIA

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ABSTRACT: *The purpose of this study is to examine the effect of Covid-19 on education system in Nigeria. Descriptive survey design was used for the study and 3 research questions were developed for the study as well. The sample for the study comprised of 400 students in Federal Polytechnic Ado-Ekiti, Ekiti State, Nigeria, using stratified random sampling to obtain the sample for the study. A well-structured questionnaire was used to obtain the data, which was analyzed with frequency distribution, percentages, bar-charts, relative importance index (RII) and proportional odds logistic model. The result indicates that covid-19 have effect on education system in Nigeria, majority of the respondents agreed that covid-19 will affect the academic calendar of all institution in Nigeria, and that it will also leads to suspension of lectures and examinations. The result also shows that 91% of the respondents agree that there is a negative impact of covid-19 on education in Nigeria. The research also indicates the ways to control the spread of covid-19 in Nigeria. Its concluded that there should be public awareness to contain the spread of covid-19 across every states in Nigeria and also that institutions and government should make provisions for facemask and sanitizer so as to control the spread of covid-19 in Nigeria.*

KEYWORDS: Survey, Stratified Sampling, Utilized, Questionnaires, Logistic Model, Proportional Education, Respondent



INTRODUCTION

Nigeria has a federal system of government with 36 states and the Federal Capital Territory of Abuja. Within the states, there are 744 local governments in total. Education is administered by the federal, state and local governments. The Federal Ministry of Education is responsible for overall policy formation and ensuring quality control, but is primarily involved with tertiary education. School education is largely the responsibility of state (secondary) and local (elementary) governments. The country is multilingual, and home to more than 250 different ethnic groups. The languages of the three largest groups, the Yoruba, the Ibo, and the Hausa, are the language of instruction in the earliest years of basic instruction; they are replaced by English in Grade 4. WENR, (2017).

Nigeria's education system encompasses three different sectors: basic education (nine years), post-basic/senior secondary education (three years), and tertiary education (four to six years, depending on the program of study). According to Nigeria's latest National Policy on Education (2004), basic education covers nine years of formal (compulsory) schooling consisting of six years of elementary and three years of junior secondary education. Post-basic education includes three years of senior secondary education. (WENR, 2017). At the tertiary level, the system consists of a university sector and a non-university sector. The latter is composed of polytechnics, monotronics, and colleges of education. The tertiary sector as a whole offers opportunities for undergraduate, graduate, and vocational and technical education. The academic year typically runs from September to July. Most universities use a semester system of 18 – 20 weeks. Others run from January to December, divided into 3 terms of 10 -12 weeks. The National University Commission (NUC), the government umbrella organization that oversees the administration of higher education in Nigeria, listed 40 federal universities, 44 state universities and 68 private universities as accredited degree-granting institutions on its website as of 2017.

Many of these institutions are relatively new. In response to demographic pressures Nigeria's higher education sector expanded over a relatively short period. In 1948, there was only one university-level institution in the country, the University College of Ibadan, which was originally an affiliate of the University of London. By 1962, the number of federal universities had increased to five: the University of Ibadan, the University of Ife, the University of Nigeria, Ahmadu Bello University, and the University of Lagos (WENR, 2017).

Between 1980 and 2020, the number of recognized universities has grown tenfold from 16 to 170, as reported by Nigeria's National Universities Commission. For the first few decades of growth, higher education capacity building was primarily in the public sector, driven by Federal and State governments. More dramatic growth occurred beginning in the late 1990s, when the Nigerian government began to encourage the establishment of private universities. Since then, private institutions, which constitute some 45 percent of all Nigerian universities as of 2017, have proliferated at a rapid pace, from 3 in 1999 to 68 in 2017. About two thirds of these institutions are estimated to be religiously affiliated schools. Despite the sheer number of private institutions that have opened, enrollments seem to be relatively low. Although estimates are difficult to find, the small number of United Tertiary Matriculation Examination (UTME) applications to private universities indicates that private universities account for only a small percentage of Nigeria's total tertiary enrollment, which UIS reported as 1,513, 371 as of 2011. Covenant University, Nigeria's largest private university reportedly



had a total enrollment of 6,822 students in 2010/2011 (WENR, 2017). Nigeria's 43 federal universities as well as dozens of teaching hospitals and colleges are under the direct purview of the NUC. State governments have responsibility for the administration and financing of the 48 state universities, private individuals have responsibility for the administration of 79 private universities, bringing the total number of universities in the country to 170.

According to the World Health Organization (WHO), coronaviruses are a family of viruses that cause illnesses ranging from the common cold to more severe diseases such as severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS). These viruses were originally transmitted from animals to people. SARS, for instance, was transmitted from civet cats to humans while MERS moved to humans from a type of camel. Several known coronaviruses are circulating in animals that have not yet infected humans. The name coronavirus comes from the Latin word corona, meaning crown or halo. Under an electron microscope, it looks like it is surrounded by a solar corona. The novel coronavirus, identified by Chinese authorities on January 7 and since named SARS-CoV-2, is a new strain that had not been previously identified in humans. Little is known about it, although human-to-human transmission has been confirmed.

As of April 4, more than 60,000 people worldwide have died of COVID-19, the highly infectious respiratory disease caused by the coronavirus. The number of people who have tested positive for COVID-19 has exceeded 1 million, according to data compiled by Johns Hopkins University. Countries around the world are scrambling to halt the spread of the coronavirus pandemic. This outbreak of COVID-19 is a global health emergency, the WHO said on January 30, raising the alarm further on March 11 when it declared the crisis a pandemic.

On 27 February, Nigeria confirmed its first case in Lagos State, an Italian citizen who works in Nigeria had returned on 25 February from Milan, Italy through the Murtala Muhammed International Airport, fell ill on 26 February and was transferred to Lagos State Biosecurity Facilities for isolation and testing. Presently, Nigeria is having 199 COVID-19 cases, two deaths and twenty recovered. In order to contain the spread of the virus in Nigeria, the Federal Ministry of Education has directed all educational institutions in Nigeria to shut down and allow students to go home as cases of reported COVID-19 increased to 13. The Permanent Secretary in the Ministry of Education, Sonny Echono, told reporters on 19 March that the directive was part of the country's overall strategy to contain the spread of the virus. Nigeria joins the growing list of countries in Africa which have closed schools and universities. Before the official announcement by the permanent secretary, most universities had already sent their students home (Wikipedia, 2020). This article is aimed to discuss the impact of COVID-19 school closures on the higher institutions in Nigeria and to suggest some ways out.

Research Questions

The following research questions were developed for the study. They include

1. Does Covid-19 pandemic have impact on education system in Nigeria?
2. Would Covid-19 pandemic affect education system in Nigeria?
3. What are the educational systems doing to contain the spread of Covid-19 in Nigeria?



The aim of this study is to explore the possibility of the effect of COVID 19 on educational system in Nigeria.

The specifies objectives are;

- to examine the major effects of COVID-19 on educational system
- to examine the impacts of COVID-19 on educational system
- to identify ways the educational system could contain the spread of COVID-19

LITERATURE REVIEW

According to the World Health Organization (WHO), corona viruses are a family of viruses that cause illnesses ranging from the common cold to more severe diseases such as severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS). These viruses were originally transmitted from animals to people. SARS, for instance, was transmitted from civet cats to humans while MERS moved to humans from a type of camel. Several known corona viruses are circulating in animals that have not yet infected humans. The name corona virus comes from the Latin word corona, meaning crown or halo. Under an electron microscope, it looks like it is surrounded by a solar corona. The novel corona virus, identified by Chinese authorities on January 7 and since named SARS-CoV-2, is a new strain that had not been previously identified in humans. Little is known about it, although human-to-human transmission has been confirmed. Chinese health authorities are still trying to determine the origin of the virus, which they say likely, came from a seafood market in Wuhan, China where wildlife was also traded illegally. On February 7, Chinese researchers said the virus could have spread from an infected animal species to humans through illegally-trafficked pangolins, which are prized in Asia for food and medicine. Scientists have pointed to either bats or snakes as possible sources of the virus.

According to the WHO, signs of infection include fever, cough, and shortness of breath and breathing difficulties. In more severe cases, it can lead to pneumonia, multiple organ failure and even death. Current estimates of the incubation period - the time between infection and the onset of symptoms - range from one to 14 days. Most infected people show symptoms within five to six days. However, infected patients can also be asymptomatic, meaning they do not display any symptoms despite having the virus in their systems.

On 27 February, 2020, Nigeria confirmed its first case in Lagos State, an Italian citizen who works in Nigeria had returned on 25 February, 2020 from Milan, Italy through the Murtala Muhammed International Airport, fell ill on 26 February, 2020 and was transferred to Lagos State Biosecurity Facilities for isolation and testing. Presently, Nigeria is having 199 Covid-19 cases, two death and twenty recovered. In order to contain the spread of the virus in Nigeria, the Federal Ministry of Education has directed all educational institutions in Nigeria to shut down and allow students to go home as cases of reported COVID-19 increased to 13. From February 27 till May 10, the virus have infected over 434 people, spread to 34 out of 36 states of federation. Over 600 have recovered from the Covid-19 and the fatalities rate is 95. Submits that eighty-three thousand to 190 000 people in Africa could die of COVID-19 and 29 million to 44 million could get infected in the first year of the pandemic if containment



measures fail, a new study by the World Health Organization (WHO) Regional Office for Africa finds. The research, which is based on prediction modelling, looks at 47 countries in the WHO African Region with a total population of one billion. The new estimates are based on modifying the risk of transmission and disease severity by variables specific to each country in order to adjust for the unique nature of the region. The model predicts the observed slower rate of transmission, lower age of people with severe disease and lower mortality rates compared to what is seen in the most affected countries in the rest of the world. This is largely driven by social and environmental factors slowing the transmission, and a younger population that has benefitted from the control of communicable diseases such as HIV and tuberculosis to reduce possible vulnerabilities. The lower rate of transmission, however, suggests a more prolonged outbreak over a few years, according to the study which also revealed that smaller African countries alongside Algeria, South Africa and Cameroon were at a high risk if containment measures are not prioritized.

Observes that the outbreak of pandemic Covid-19 all over the world has disturbed the political, social, economic, religious and financial structures of the whole world. World's topmost economies such as the US, China, UK, Germany, France, Italy, Japan and many others are at the verge of collapse. Besides, Stock Markets around the world have been pounded and oil prices have fallen off a cliff. In just a week 3.3 million Americans applied for unemployment and a week later another 6.6 million people started searching for jobs. Also, many experts on economic and financial matters have warned about the worsening condition of global economic and financial structure. Such as Kristalina Georgieva, Managing Director of International Monetary Fund (IMF), explained that "a recession at least as bad as during the Global Financial Crisis or worse". Moreover, Covid-19 is harming the global economy because the world has been experiencing the most difficult economic situation since World War-II. When it comes to the human cost of the Coronavirus pandemic it is immeasurable therefore all countries need to work together with cooperation and coordination to protect the human beings as well as limit the economic damages. For instance, the lockdown has restricted various businesses such as travelling to contain the virus consequently this business is coming to an abrupt halt globally.

Submits that the coronavirus (COVID-19) pandemic that has swept across the globe in the last few weeks and months has not only had a significant impact on public health, society, and the economy as a whole, it has also wreaked havoc to the sporting calendar. In a bid to stem the spread of the virus, many professional and amateur leagues across all continents and sports took the unprecedented step to postpone or suspend their seasons on the advice of the CDC to avoid gatherings of large amounts of people. Observes that the COVID-19 pandemic and the measures put in place to contain its diffusion are taking a heavy toll on the tourism sector. According to the United Nations World Tourism Organization (UNWTO), the COVID-19 pandemic will result in a contraction of the tourism sector by 20% to 30% in 2020. Observes that No matter where in the world or in which sector, the crisis is having a dramatic impact on the world's workforce", ILO said in its latest report. "Policy responses need to focus on providing immediate relief to workers and enterprises in order to protect livelihoods and economically viable businesses, particularly in hard-hit sectors and developing countries."

An additional concern is the fact that in low and middle-income countries, the worst-hit industries and services have a high proportion of low-wage workers in informal employment, with limited access to health services and State welfare safety nets. "Without appropriate



policy measures, workers face a high risk of falling into poverty and will experience greater challenges in regaining their livelihoods during the recovery period”, ILO said in its latest report on the situation. It underscored that around two billion people work informally, most of them in emerging and developing countries, and that “tens of millions” of informal workers have already been affected by COVID-19. In urban areas, moreover, these workers also tend to work in economic sectors that “not only carry a high risk of virus infection but are also directly impacted by lockdown measures”: waste recyclers, street vendors and food servers, construction workers, transport workers and domestic workers. Highlighting the impacts already being felt in India, ILO pointed out that with its share of almost 90 per cent of people working in the informal economy, about 400 million workers in the vulnerable sector now face falling greater impoverishment. Current lockdown measures there have impacted these workers significantly, forcing many of them to return to rural areas, ILO explained, adding that Brazil and Nigeria had a similar level of informal employment as India, and faced the same risks.

Conducted a study is to find out the perception of undergraduate students on the impact of Covid-19 pandemic on higher education development in Federal Capital Territory, Abuja, Nigeria. This study adopted the descriptive research design of the survey type. The study population comprised all higher institutions in FCT, Nigeria. Out of this population, a sample of two higher institutions was taken and selected through the stratified random sampling technique. Out of the 2,05,878 undergraduate students, 200 undergraduate students made up of final years students were selected from the sampled two higher institutions. The method of selection was also through the stratified random sampling technique. The instrument used to collect data for the study was a questionnaire titled “Perception of Undergraduate Students on the Impact of COVID-19 Pandemic on Higher Institutions Development Questionnaire. The questionnaire was in two parts A and B. Part A was demographic. The reliability of instrument was determined using the test-retest reliability techniques. The instruments were administered through the use online medium. Data collected were analyzed using simple percentage and Chi-square test was used to test the hypotheses. Result collected and analyzed showed that;100% of the respondents agreed that Covid-19 pandemic affects the academic calendar of higher institutions; 90.5% of the respondent agreed that Covid-19 pandemic would have effect on implementation of higher institutions financial budget for 2020; 94.5% of the respondents agreed that Covid-19 pandemic have relationship with reduction of manpower in higher institutions; 100% of the respondents agreed that Covid-19 pandemic have relationship with the cancelation of academic conferences of higher institutions and 89% of the respondents agreed that online education is the alternative measures for conversional in class teaching and learning for future occurrences of any pandemic.

Did a study to find out the effects of COVID-19 Schools Close Down on the Senior Secondary School Academic.



METHODOLOGY

The research designed used in conducting the study was descriptive survey. The target population for the study was the totality of all students in federal polytechnic Ado- Ekiti, which runs into thousands. However, for reason of feasibility, the sample was selected from each school(faculty) of the institution. Using stratified random sampling technique, the population were divided into four(4) strata using the school. A combination of stratified and simple random sampling techniques was utilized in selecting a total of 400 students. The instrument used for data collection was a structured questionnaire. The questionnaire comprised of four sections. Section A comprises of three(3) items that sought to verify the respondent's demographic information. Section B comprised 3 items that deals with the impact of COVID-19 on education in Nigeria. Section C comprised of 5 items of the 5-likert type that sought to determine the effect of COVID- 19 on education in Nigeria. Section D comprised of 5 items of the 5-likert type that sought to determine the ways to control the spread of COVID- 19 in Nigeria.

Technique of Data Analysis

A total of 400 questionnaires were administered in the survey but 372 were returned valid for the research. The technique of data analysis is based on frequency distribution, percentages, bar charts. Frequency distribution is used to tabulate survey responses from SPSS. The percentages in the frequency tables were then used to plot bar charts to examine the impact of covid-19 on education in Nigeria. Relative importance index (RII) was used to analyze the respondent's response on the effect of covid-19 on education in Nigeria and their response on the ways to contain the spread of covid-19 in Nigeria. Proportional odds logistic model was use to measure the usage of facemask in Nigeria.

An evaluation rating of strongly agree, agree, undecided, disagree and strongly disagree was applied in assessing the effect of covid-19 on education in Nigeria.

Strongly agree: performance in tandem with target and carried out according to planned time.

Agree: performance might be in tandem with target but with time variation.

Undecided: performance is neutral.

Disagree: performance not in tandem with target and with time variation.

Strongly disagree: absolute non-performance.

DATA AND ANALYSIS

This section is divided into four sub-sections for clarity presentation. The first section analyzes personal data of the respondents. The second section examines the impact and effect of Covid-19 on education system in Nigeria. While the third section identify the effect of Covid-19 on education in Nigeria, and the fourth section identify the ways to control the spread of Covid-19 in Nigeria.



Personal Data of Respondent

The following client's personal information was analyzed using frequency table and bar charts.

Table 1: Respondents gender

Sex

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	203	54.6	54.6	54.6
female	169	45.4	45.4	100.0
Total	372	100.0	100.0	

Source: field survey, 2021

The person that partakes in the survey consists of male and female. The field respondents reveals that male constitute the majority, i.e. male consists of about 55% while female respondent is 45%, respectively. This further suggested the quality of response from respondents.

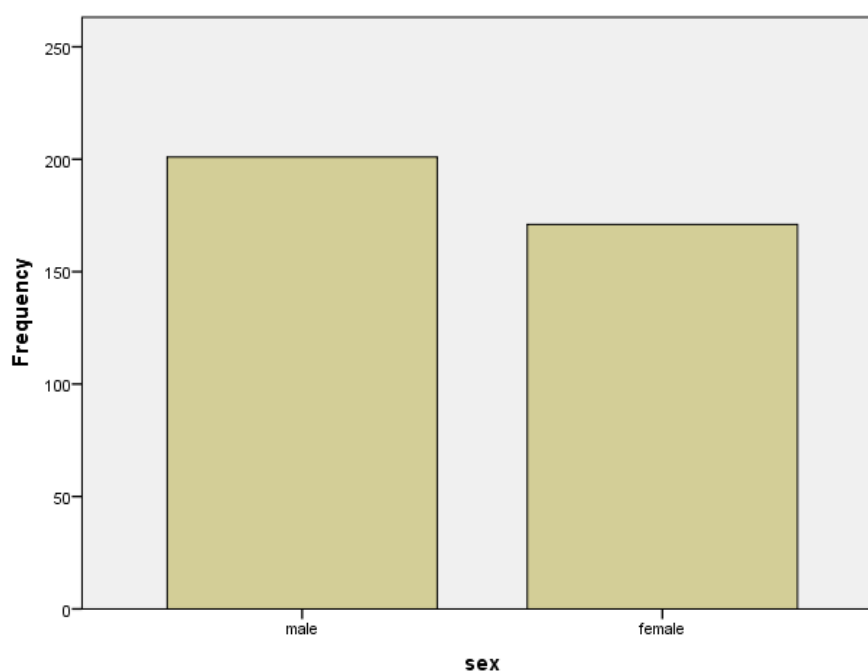


Figure 1: This graph shows the respondent's gender that participated in the survey

**Table 2: Respondent's school (faculty)**

School		Frequency	Percent	Valid Percent	Cumulative Percent
	SOS	95	25.5	25.5	25.5
	SOE	90	24.2	24.2	49.7
Valid	SES	96	25.8	25.8	75.5
	SBS	91	24.5	24.5	100.0
	Total	372	100.0	100.0	

Source: field survey, 2021

It was indicated from the survey that the percentage of respondent that participated in the survey are equally distributed among the school, i.e 25.5% of the respondent are from school of science and computer studies, 24.2% of the respondent are from school of engineering, 25.8% of the respondent are from school of environmental and also 24.5% of the respondent are from school of business.

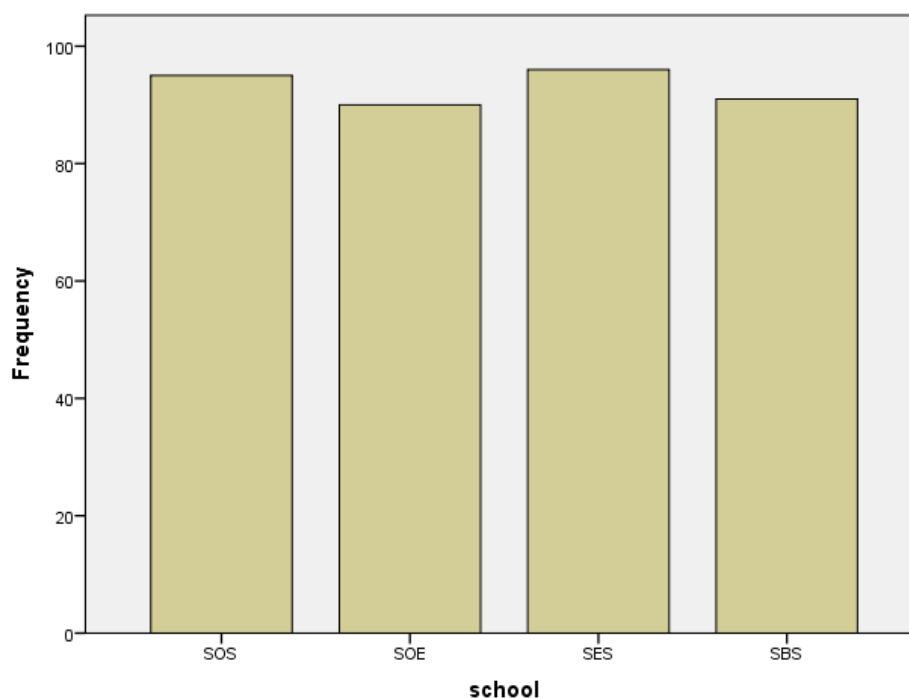


Figure 2: *The graph shows the frequency of respondent's school that participated in the survey. In which school of environmental have the highest frequency of respondent that participated in the survey*



QUESTIONS RELATED TO IMPACT OF COVID-19 ON EDUCATION IN NIGERIA

To examine the impact of covid-19 on education in Nigeria, we made use of frequency table and bar chart to analyse this section

Table 3: Respondent’s awareness to COVID-19 crisis in Nigeria.

are you aware of COVID-19 crisis in Nigeria?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	368	98.9	99.5	99.5
Valid no	2	.5	.5	100.0
Total	370	99.5	100.0	
Missing System	2	.5		
Total	372	100.0		

Source: field survey, 2021

The above table shows that 98.9% of the respondents said they are aware of covid-19 crisis in Nigeria. While 1% of the respondents said they aren’t aware of covid-19 crisis in Nigeria.

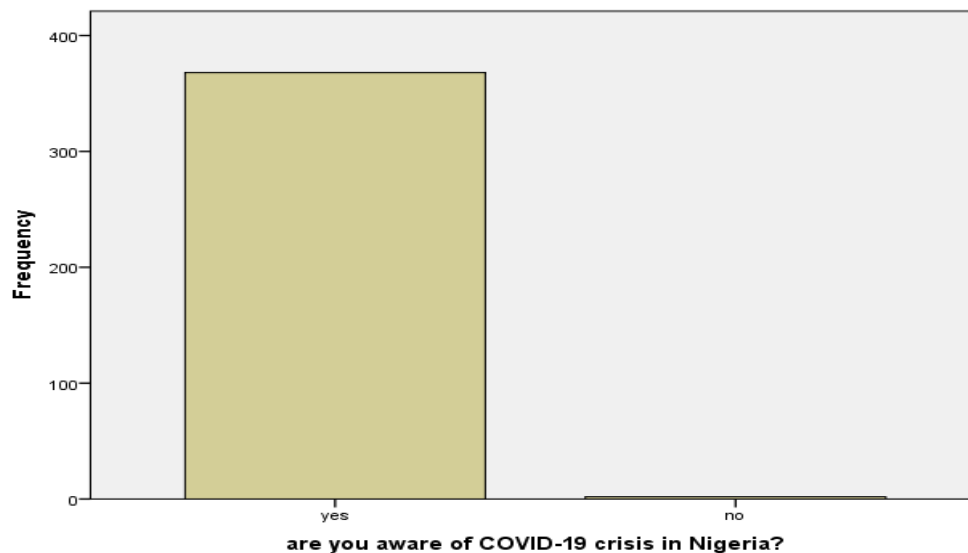


Figure 3: The chart above shows the respondent’s awareness to covid-19 crisis in Nigeria.



Table 4: Is there any impact of covid-19 on education in Nigeria?

is there any impact of COVID-19 on education in Nigeria?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	352	94.6	95.4	95.4
Valid no	17	4.6	4.6	100.0
Total	369	99.2	100.0	
Missing System	3	.8		
Total	372	100.0		

Source: field survey, 2021

From the table above, its shown that 95% of the respondent said that Covid-19 have impact on education system in Nigeria, while 5% of the respondents said that covid-19 has no impact on education in Nigeria.

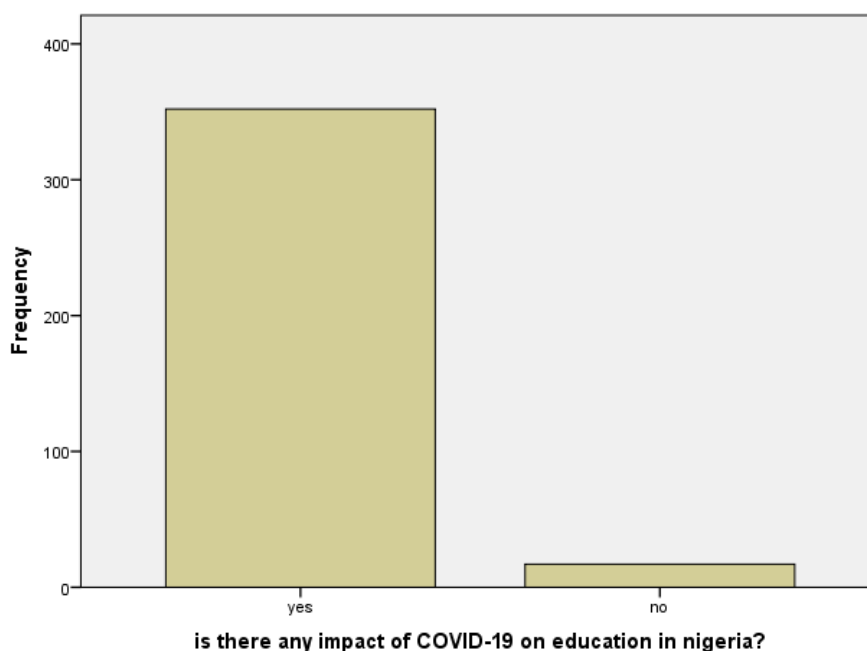


Figure 4: The chart shows the impact of covid-19 on education in Nigeria.



Table 5: if yes, what can you say about the impact of Covid-19 on education

if yes, what can you say about the impact

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid negative	337	90.6	92.6	92.6
Valid positive	27	7.3	7.4	100.0
Total	364	97.8	100.0	
Missing System	8	2.2		
Total	372	100.0		

Source: field survey, 2021

The table indicated that 91% of the respondent that participated in the survey said that covid-19 have a negative impact on education, while 7% of the respondents said that covid-19 have a positive impact on education.

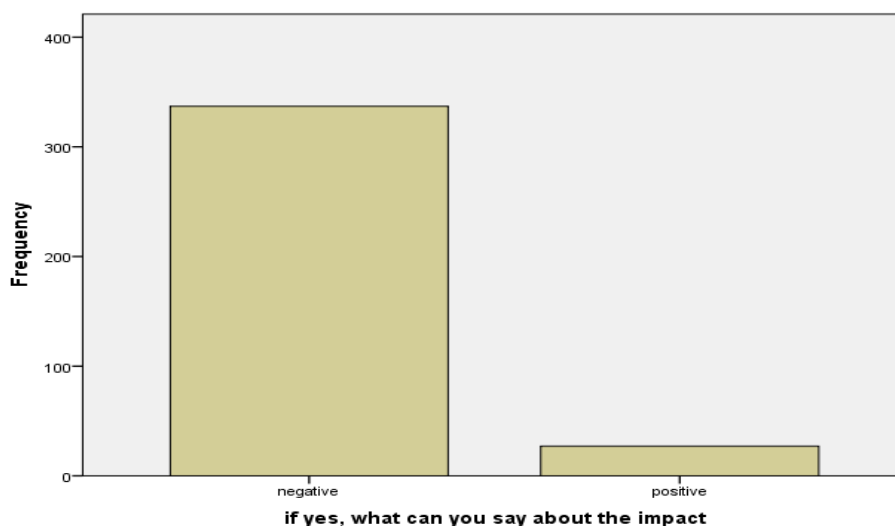


Figure 5: The fig above shows that there is a negative impact of covid-19 on education in Nigeria.



QUESTIONS RELATED TO THE EFFECT OF COVID-19 ON EDUCATION IN NIGERIA

Table 6: Effect of Covid-19 on education in Nigeria.

This section of the survey was analyzed using relative importance index (RII)

EFFECT OF COVID-19	SA	A	U	D	SD	Σ	N	A*N	RII	rank
It will lead to suspension of lectures and examination	242	104	8	11	7	372	372	1860	0.9027	2
Will affect the academic calendar	257	101	12	0	1	371	372	1860	0.9230	1
Suspension of all extra-curriculum activities of the school	162	149	50	8	1	370	372	1860	0.7731	4
Negative effect on student's performance in their studies	221	119	13	16	3	372	372	1860	0.8898	3
Decrease in population of student and staff	104	153	68	33	14	372	372	1860	0.7613	5

Source: field survey, 2021

The table above shows the relative importance index RII analysis for the criteria on the effect of covid-19 on education in Nigeria. The most effective is that it will affect the academic calendar with RII = 0.9230, the next most effective is it will lead to suspension of lectures and examination with RII = 0.9027. Follow by negative effects on student's performance in their studies with RII = 0.8898, suspension of all extra-curriculum activities in the school with RII = 0.7731, while the least effect is that there will be decrease in the population of student and staff with RII = 0.7613.

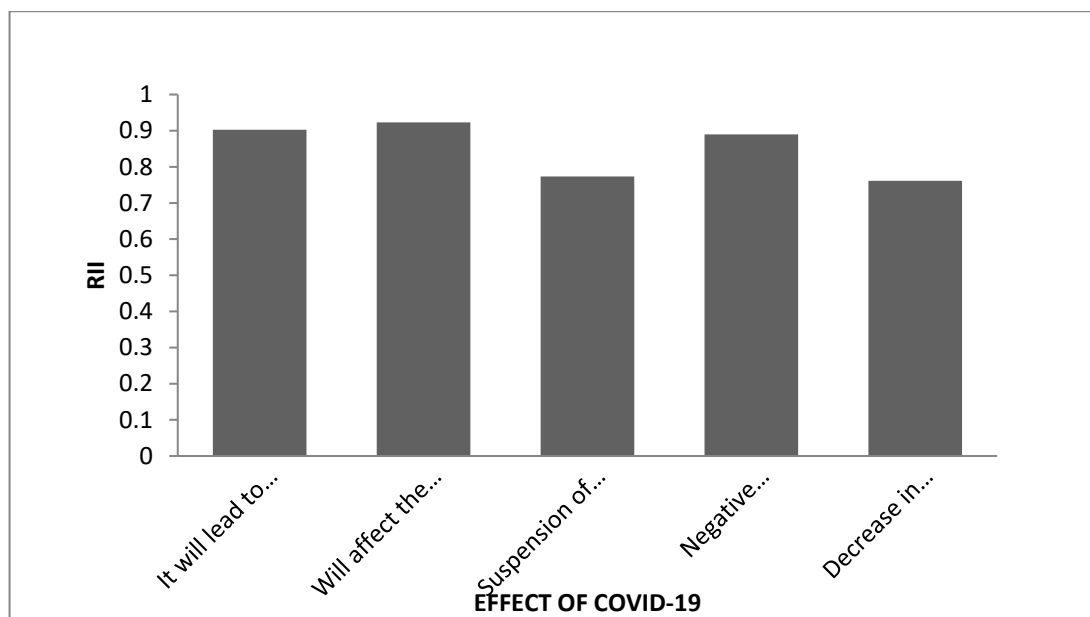


Figure 6: The graph above shows the effect of covid-19 on education system in Nigeria.

QUESTIONS RELATED TO THE WAYS TO CONTROL THE SPREAD OF COVID-19 IN NIGERIA

Table 7: Ways to control the spread of Covid-19 in Nigeria.

WAYS TO CONTROL COVID-19	SA	A	U	D	SD	Σ	N	A*N	RII	Rank
Public awareness to contain the spread of COVID-19	234	128	5	2	1	370	372	1860	0.9151	1
Provision of facemask and sanitizer for staff and student	248	102	14	2	5	371	372	1860	0.9134	2
Practicing social distance	180	121	61	9	0	371	372	1860	0.8522	4
Making use of facemask and sanitizer compulsory	173	110	61	28	0	372	372	1860	0.8301	5
Collaboration of institutions on the research for COVID-19 vaccine	205	125	23	12	6	371	372	1860	0.8731	3

Source: field survey, 2021



The table above shows the relative importance index RII analysis for the criteria on the effect of covid 19 on education in Nigeria. The most effective is Public awareness to contain the spread of COVID-19 with RII = 0.9151, the next most effective is Provision of facemask and sanitizer for staff and student with RII = 0.9134. Follow by negative Collaboration of institutions on the research for COVID-19 vaccine with RII = 0.8731, Practicing social distance distancing with RII = 0.8522, while the least is Making use of facemask and sanitizer compulsory with RII = 0.8301

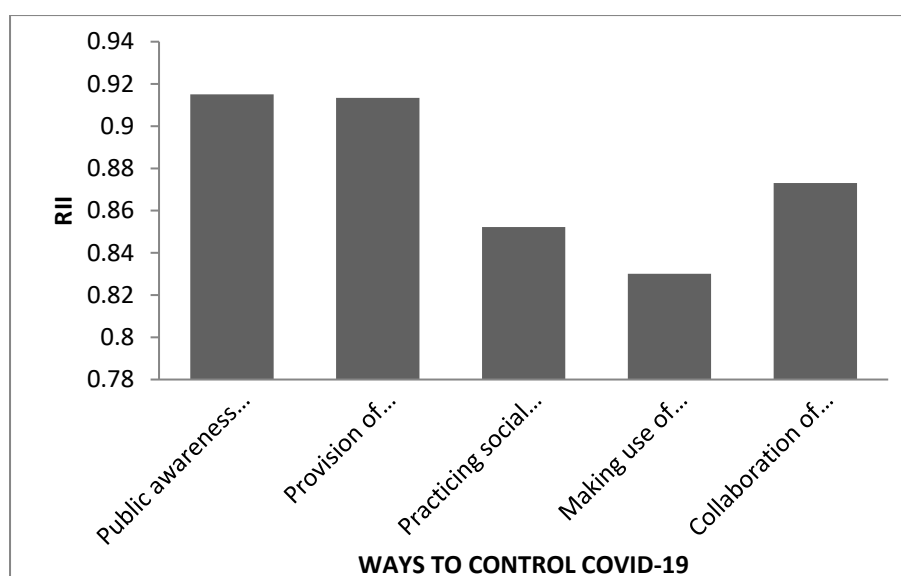


Figure 7: The graph above shows the ways to control the spread of covid-19 in Nigeria.

MEASURING THE USAGE OF FACEMASK IN NIGERIA

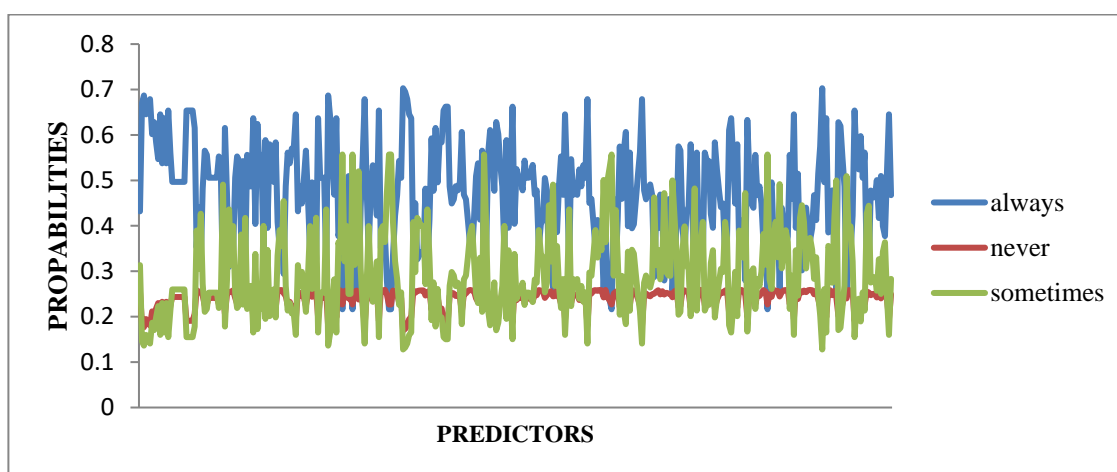
Using proportional odd logistic regression model. Making use of social distancing, gender and school as predictor for the usage of facemasks. Below are the output of logistic regression(proportional odds) from R package.

Table 8: Data presentation

	Face	gender	socdist	school	Age
1	sometimes	female	Yes	ses	24
2	always	male	Yes	soe	24
3	always	male	Yes	soe	26
4	always	male	Yes	soe	21
5	always	male	Yes	soe	23
6	always	male	Yes	soe	25

Table 9: Usage frequency of facemasks

Face	gender	socdist	school	Age
Sometimes	female	yes	ses	24
Always	male	yes	soe	24
Always	male	yes	soe	26
Always	male	yes	soe	21
Always	male	yes	soe	23
Always	male	yes	soe	25

**Figure 8: The graph above shows the predicted probabilities of the response.****SUMMARY****To find out if there is impact of Covid-19 on education system in Nigeria.**

Result on table 3 shows that 99% of the respondents are aware of covid-19 crisis in Nigeria, this shows that almost all the respondents are aware of Covid-19 crisis in Nigeria, while Table 5 shows that 91% of the respondents agreed that there is a negative impact of Covid-19 on education in Nigeria.

To find out if there is an effect of Covid-19 on education system in Nigeria

Table 6 disclosed that majority of the respondents strongly agreed and agreed that; covid-19 will lead to suspension of lectures and examination, Will affect the academic calendar, Suspension of all extra-curriculum activities of the school, Negative effect on student's performance in their studies, and that there will be decrease in population of student and staff are the effect of covid-19 on education system in Nigeria. From the table also, relative importance index (RII) tells that major effect of covid-19 on education in Nigeria is that Covid-19 Will affect the academic calendar of Nigeria institutions.



To find out if there exist ways to control the spread of Covid-19 in Nigeria.

Table 7 shows that majority of the respondents agreed that Public awareness to contain the spread of COVID-19, Provision of facemask and sanitizer for staff and student, Practicing social distance, Making use of facemask and sanitizer compulsory, and Collaboration of institutions on the research for COVID-19 vaccine are the ways to contain the spread of Covid-19 in Nigeria. The table also shows that Public awareness to contain the spread of COVID-19 is the best way to control covid-19 in Nigeria.

To measure the usage of facemasks

The model predicts that students who tends to use facemasks always (predictor) has the highest probabilities than other predictors.

CONCLUSIONS

This research work focused on studying the effect of covid-19 on education in Nigeria and after the analysis and collations of the result, it is established that covid-19 have effect on education system in Nigeria. It is also established from the result that there is negative impact of Covid-19 on education system in Nigeria and that covid-19 will affect the academic calendar of schools in Nigeria. The result also established that covid-19 will leads to suspension of all lectures and examination in schools across Nigeria. It was gathered from the result that there should be public awareness that contain the spread of covid-19 all over the states in Nigeria, so as to let everyone know about the existence of covid -19 in Nigeria. Also that making provisions for facemask and sanitizer for both students and staffs is one the best ways to control the spread of covid-19 in Nigeria. Its also concluded that students use

RECOMMENDATIONS

Based on the finding, the research hereby recommends that;

- There should be public awareness to contain the spread of covid-19 across Nigeria.
- Institutions should make provisions for facemask and sanitizer for both students and staffs and also make the use of facemask and sanitizer compulsory.
- Nigeria institutions should collaborate and make vaccine for covid-19.
- There should be practice of social distances across Nigeria.



REFERENCES

- [1] Agresti, A. (2002). *Categorical Data Analysis*. Wiley series in probability and mathematical statistics. John Wiley and Sons. New York, NY.
- [2] Anderson, J. A. 1984. *Regression and ordered categorical variables (with discussion)*. Journal of Royal Statistical Society Series B. 46:1-30.
- [3] Brant, R. (1990). Assessing proportionality in the *proportional odds model for ordinal logistic regression*. Biometrics 46: 1171-1178.
- [4] Cox C. (1995). Location-scale cumulative odds models ordinal data: *A generalizated non-linear model approach*. Statistics in Medicine 14: 1191-1203.
- [5] Gupta, S. C. *fundamentals of statistics*, seventh revised and Enlarged edition.
- [6] Freund, R and Wilson, W. *regression analysis: statistical modeling of a response variable*, Academic press, 1998.
- [7] Gül den Kaya Uyanık; Neşe Güler, *A Study on Multiple Linear Regression Analysis*, Procedia Social and Behavioral Sciences, 106 (2013) 234-240. doi:10.1016/j.sbspro. Dec. 27, 2013.
- [8] McCullagh, P. (1980), *Regression model for ordinal data*. Journal of Royal Statistical Society series B. 42(2):109-142.
- [9] Peterson B and Harrell Fe Jr. (1990). *Partial proportional odds models for ordinal response variables*. Applied Statistics. 39:205-217.