

UPSHOT OF COVID-19 ON THE ACADEMIC PERFORMANCE OF STUDENTS IN TERTIARY INSTITUTION IN ENUGU STATE

Rev. Fr. Dr. Stephen Abuchi Ezenwagu¹

Educational Management and Policy Department, Faculty of Education Nnamdi Azikiwe University Awka, Anambra State

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DR. OGBUOKA, Oby Modest

Dean Faculty of Social Sciences
African Thinkers Community of Inquiry College of Education Enugu, Enugu State
obyphd@gmail.com

ABSTRACT

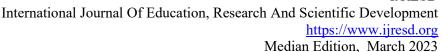
This study was carried out to examine the consequences of covid-19 on the academic performance of students in tertiary institution in Enugu state. The study adopted a descriptive survey research design. The population of this study consisted of 13, 304 of all third (300L) students from the thirteen (13) tertiary institution in Enugu State. Using simple random sampling the researcher selected three hundred and eighty seven (387) students as the sample size. The instrument used for data collection was a structured questionnaire. The instrument was face validated by three experts. To determine the reliability of the instrument, the researcher employed a Test –retest method using spearman Rank order coefficient. The reliability value is 0.75. Mean was used to answer research questions. The findings from the study showed that; Covid-19 has led to the closing of schools for a long time and also destabilized school calendar. Some students could not continue with their studies after the lockdown leading to drop-out. Use of hand sanitizers, regular wearing of nose masks and building isolation center in the school compound are measures taken to reduce the effects of covid-19. The government should increase the funding of tertiary institutions in next year's budget to allow them to manage all the damages caused by the COVID-19 school close down. The Nigeria government should direct all the tertiary institutions to conduct online teaching and jointly solve new problems that may arise in the teaching process. The government should reduce the maximum number of lessons per week for lecturers. This would afford them adequate time to prepare and deliver the content effectively and efficiently.

Keywords: Upshot, COVID-19, Students and Tertiary

Introduction

Coronavirus disease 2019 (COVID-19) is firstly identified in Wuhan city, Hubei Province, China in December 2019 as a pneumonia of unknown origin (Zhu, 2020). Later, the international committee on taxonomy of viruses (ICTV 2020) identifies the causative agent of COVID-19 as a novel coronavirus, severe acute respiratory

syndrome coronavirus—2 (SARS—CoV—2). COVID-19 outbreak spreads rapidly not only in China, but also worldwide, therefore, the World Health Organization (WHO) has announced it as pandemic on March 12, 2020 (WHO, 2020). The total number of confirmed cases and mortalities are 23,491,520 and 809,970, respectively, in 216





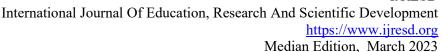
countries as of August 25, 2020 (WHO, 2019).

According to the World Health Organization (WHO), coronaviruses area 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 electronmicroscope, the looks like it are 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 (Ajazeera, 2020).

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 - ranging 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 (Ajazeera, 2020).

Several governmental measures have been taken to counter act the risk of disease spreading. These measures include travel restrictions, mandatory quarantines for travelers, social distancing, bans on public gatherings, schools and universities closure, business closures, self-isolation, asking people to work at home, curfews, and lockdown (Bedford). Authorities in several countries worldwide have declared either lockdown or curfew as a measure to break the fast spread of virus infection (Paital, 2020). These measures have a negative worldwide effect on business, education, health, and tourism.

The tertiary education sector is composed of all universities; colleges of education and technology and other institutes of postsecondary education (Ofojebe 2022). some countries, Odeyemi (2014) noted that the difference between universities and other tertiary institutions is the fact that research takes place in universities. In such countries accordingly, universities have research culture in which it is assumed that most lecturers will engage in research. It also may also include all research institutes, campuses experimental and schools operating under the direct control of, or administered by, or associated with, the education establishments. Higher Education is any of the various types of education given in postsecondary institutions of learning and usually affording, at the end of a course of study, a named degree, diploma, or certificate of higher studies (FME, 2019). Higher educational institutions include not only universities and colleges, but also various professional schools that provide preparation in such fields as law, theology, medicine, business, music, and art. Higher education also includes teacher-training schools, junior colleges, and institutes of technology (FRN, 2014). The basic entrance requirement for most higher-educational institutions is the completion of secondary





education, and the usual entrance age is about 18 years in advanced countries (College University, 2010, Higher education, 2010).

Higher Institution Education

Higher education institutions according to Nwadike (2018) are Universities, colleges, and further education institutions offering delivering higher education. an institution of higher learning which universities, includes polytechnics, agricultural colleges, which specialise in different fields such as engineering, agriculture, medicine, pedagogy, the arts, and economics among others (Eze, 2016). Higher education institutions include traditional professionaluniversities and oriented institutions. which are called sciences universities of applied polytechnics. An organisation that is mandated to provide higher education in a country (Adindu, An educational institution in any State that admits as regular students only persons having a certificate of graduation from a school providing secondary education and is legally authorized within such State to provide a program of education beyond provides secondary education; an educational program for which the institution awards a bachelor's degree, or awards a degree that is acceptable for admission to a graduate or professional degree program, subject to review and approval by the Secretary; and is a public or other nonprofit accredited institution (20 U.S. Code § 1001 - General definition of institution of higher education).

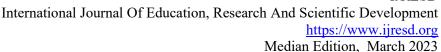
This is a tertiary education establishment providing academic programs leading to an academic degree. It could be a public or private institution and be either not for profit or a profit-based entity. Higher education

institutions include traditional scientific universities and professionaloriented institutions. which are called universities applied sciences of polytechnics (Obidike, 2011). Higher education institutions include traditional universities professionand Finland called oriented institutions. in universities of applied sciences polytechnics (Ezike, 2019). Higher education institutions include traditional universities professionally oriented institutions, which are called universities of applied sciences or polytechnics. An optional final stage of formal learning that occurs after secondary education. Higher education is usually delivered at colleges, seminaries, academies, universities, and institutes of technology (Afulunonu, 2018).

Universities that admit and train students based on their results in different disciplines and award them an academic degree or professional certification (Odilora, 2017). A university or other institution dedicated to providing education at Level 4 and above, such as bachelors, masters and doctoral degrees (Obidike, 2020). Higher education institutions include traditional universities and vocational institutions; in Finland these are referred to as "universities of applied sciences" or "polytechnics." Higher institutions include typically education traditional universities and in many countries professionally-oriented institutions known as universities of applied sciences polytechnics.

Corona Virus

The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was first identified in December





2019 in Wuhan, China. The World Health Organization declared the outbreak a Public Health Emergency of International Concern in January 2020 and a pandemic in March 2020 (World Health Organization; WHO, 2020). As of 12 March 2021, more than 118 million cases have been confirmed. with more than 2.63 million deaths attributed to COVID-19, making it one of the deadliest pandemics in history. Symptoms of COVID-19 are highly variable, ranging from none to life-threatening illness. virus spreads mainly through the air when people are near each other (International Institute of Health, 2020). It leaves an infected person as they breathe, cough, sneeze, or speak and enters another person via their mouth, nose, or eyes.

Recommended preventive

measures include social distancing. wearing face masks in public, ventilation and air-filtering, hand washing, covering one's mouth when sneezing or coughing, disinfecting surfaces. and monitoring and self-isolation for people exposed or symptomatic. Several vaccines are being developed and for. Current treatments focus on addressing symptoms while work is underway to develop therapeutic drugs that inhibit the virus. Authorities worldwide have responded by implementing travel restrictions, lockdowns, workplace hazard controls, and facility closures. Many places have also worked to increase testing capacity and trace contacts of the infected (Scottish Health Information, 2021).

The responses to the pandemic have resulted in significant global social and economic disruption, including the largest global recession since the Great Depression(international monetary fund; 2020). It has led to the postponement or cancellation of events, widespread supply

shortages exacerbated by panic buying, agricultural disruption and food shortages, and decreased emissions of pollutants and greenhouse gases. Many educational institutions and public areas have been partially or fully closed. Misinformation has circulated through social media and mass media. The pandemic has raised issues of racial and geographic and the discrimination, health equity, balance between public health imperatives and individual rights.

The virus that causes COVID-19 spreads mainly when an infected person is in close contact with another person (World Health organization, 2020).Small droplets and aerosols containing the virus can spread from an infected person's nose and mouth as they breathe, cough, sneeze, sing, or speak. Other people are infected if the virus gets into their mouth, nose or eyes. The virus may also spread via contaminated surfaces, although this is not thought to be the route of transmission 2020). The exact route of transmission is rarely proven conclusively, but infection mainly happens when people are near each other for long enough (Who, 2021). People who are infected can transmit the virus to another person up to two days before they themselves show symptoms, as can people who do not experience symptoms. People remain infectious for up to ten days after the onset of symptoms in moderate cases and up 20 days in severe cases (CDC, 2020). Several testing methods have been developed to diagnose the disease. standard diagnostic method is by detection of the virus' nucleic acid by real-time reverse transcription polymerase chain reaction (rRT-PCR), transcription-mediated amplification (TMA), or by loop-mediated



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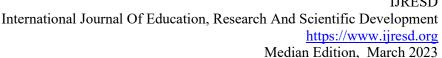
amplification from isothermal a nasopharyngeal swab.

Higher education in Nigeria according to FRN is synonymous with tertiary education. It is the education given to Nigerian citizen after secondary education in universities, colleges of education, polytechnics, monotechnics including those institutions offering correspondence courses (FRN, 2014). In the NPE, it is stated that 'the teaching and research functions of higher educational institutions have an important role to play in national development particularly in the development of high level (FRN, 2014). Furthermore, manpower' universities are one of the best means for developing national consciousness. Nigeria, higher education aims at:

- The acquisition, development and inculcation of the proper value orientation for the survival of the individual and society;
- The development of the intellectual capabilities individuals of understand and appreciate their environments;
- The acquisition of both physical and intellectual skills which will enable individuals to Develop into useful members of the community; and
- The acquisition of an objective view of the local and external environments (FRN, 2004) the NPE represents the document on which the operations of sound educational practice in Nigeria rest. Teacher education plays the critical roles of infusing in the individual knowledge; skills, competences and these have spillover effects on the development of the society (Onyenwe (2012).

Confirmed cases of the COVID-19 coronavirus have topped 4 million globally (Rosamond, 2020). Preventive measures to reduce the chances of infection include staying at home, wearing a mask in public, avoiding crowded places, keeping distance from others, ventilating indoor spaces, washing hands with soap and water often and for at least 20 seconds, practicing good respiratory hygiene, and avoiding touching the eyes, nose, or mouth with unwashed hands (CDC, 2020). Those diagnosed with COVID-19 or who believe they may be infected are advised by the CDC to stay home except to get medical care, call ahead before visiting a healthcare provider, wear a face mask before entering healthcare the provider's office and when in any room or vehicle with another person, cover coughs and sneezes with a tissue, regularly wash hands with soap and water and avoid sharing personal household items (CDC, 2020)

In Nigeria, This epidemic recently turned into a ravaging pandemic which posed a serious threat to global public health and eventually led to the total lockdown of major cites globally, (Lin, 2020). This pandemic has also led to the closure of Schools and Citizens have been advised to isolate themselves and maintain social distancing for the fear of been infected by this deadly virus (Sintema, 2020). Towards the end of March 2020, 27th to be precise through the press briefing by the Minister of Health in Nigeria, all institutions cutting across primary, secondary and tertiary institutions were instructed to close down the current academic session, due to the deadly Coronavirus which was ravaging the whole world. The conventional assessment approach adopted by most schools in Nigeria is summative assessments, where teachers teach and then administer tests and examinations to find out what learners have





achieved (Oyinlove & Imenda, 2019). Majority of the schools in Nigeria have just concluded second continuous their assessment test and unfortunately, they were about to write their second term examination before the compulsory closure due to the fear of the spread of COVID-19..

COVID-19 pandemic has affected all levels of the education system (Nicola et al, 2020). Educational institutions around the world (in 192 countries) have either temporarily closed or implemented localized closures affecting about 1.7billion student populations worldwide (UNESCO 2020). Many universities around the world either postponed or canceled all campus activities to minimize gatherings and hence decrease the transmission of the virus.

However, these measures lead to higher economical, medical, and social implications on both undergraduate and postgraduate communities (Nicolaetal, 2020; Esposito and Principi, 2020).

Due to the suspension of classroom teaching in many colleges and universities, a switch to online teaching for undergraduate and graduate students becomes effective [reviewed in (Sahu,2020; Yamin,2020)]. This form of learning provides an alternative way to minimize either the contact between students themselves or between the students and lecturers. However, many students have no access to online teaching due to a lack of either the means or the instruments due to the economical and digital divide (UNESCO2020).

Obiakor and Adeniran, (2020) found that the pandemic has impacted education in three major ways, including missed learning for the majority of the pre-pandemic students, loss of access to vital school-provided services and

leaving more kids behind. Thus, these impacts are likely to widen the gaps in and socioeconomic education quality equality following the school closures in the country. This is because a lesser percentage of learners who are in the urban areas, who are likely to hail from higher-income families, stand more chance to access education during school closure through technology Obiako & Nwankwo (2020), leaving behind the majority of learners from poor homes and underserved rural and suburban areas of the country (Zhong, 2020). Apart from this, learners in schools that lack the resources or capacity to transition to online delivery are currently missing learning (Leung & Sharma, 2020).

Learning within the homes could also be a challenge or present challenges for learning. Such depends on parents' educational attainment and other commitments, leaving a greater percentage of the learners' population behind. These problems constitute considerable concerns from all stakeholders in education (Crawford et al., 2020). Hence, even though most states in the country are currently responding through radio and television, a good fraction of the learners are still experiencing some challenges in their education. Further, to the best of researchers' knowledge, no study has investigated the impact of COVID-19 on education with particular reference to primary and secondary schools based on perspectives of education stakeholders (educators, parents and learners) in Nigeria. Therefore, this study relied on stakeholders' views to deconstruct the educational challenges posed by COVID-19 and how those challenges have impacted education and learning in primary and secondary schools. Therefore consequence of this pandemic might be by all



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the students especially the final year students. Thus, the reason for carrying out this research which is on the consequences of covid-19 on academic performance of tertiary institution students in Enugu state

Covid-19 Consequence on School Closure on Children

School attendance is one of the best public tools available to raise a child's skills, awareness and ability. However, this long period of school closure will have significant consequences on skill acquisition and growth of school children (Burke, 2020). It is worthy to note that schooling provides adequate learning but when schools close, children are deprived the opportunities for academic growth as well as academic development. The disadvantages of school closure are enormous for under-privileged students who tend to have fewer or no educational opportunity outside school (UNESCO, 2020). The closure of schools, colleges and universities does not only interrupt the teaching of students around the world, it also coincides with a key assessment period and many examinations have been postponed or cancelled as a result of COVID-19. For instance. Cambridge International Examinations that include Cambridge IGCSE, Cambridge, O Level, Cambridge International AS and A Levels, Cambridge AICE Diploma and Cambridge Pre-U examinations for May/June 2020 were (Oforjebe, canceled worldwide 2022). Though candidates could be awarded grades based on the forecast grades sent by their teachers, but, to some extent, this would not represent the true performance of the candidates as some teachers may be biased and either over-grade or undergrade their students while predicting scores for them (Odoh and Obiakor, 2022).

International examinations that were canceled due to COVID-19 include International Baccalaureate. Scholastic Aptitude Test (SAT) and American College Test (ACT). Apart from these, students who sat for Senior Secondary Certificate in Examination (WAEC) in the West African countries had their examinations postponed. The implications of this on candidates is that, thousands of students will be forced to defer the start of their studies for undergraduate studies to a later year since 2020/2021 admission processes would have ended before their results would be released.

Poorly resourced institutions and socially disadvantaged learners where limited access to technology and the internet, as well as students' inability to engage in an online undermine environment. Government response (Zhong, 2020). Against this backdrop, the study sought to know the consequences of covid-19 on the academic performance of tertiary institution students in Enugu state.

Research Questions

- What are the causes and effect of 1. covid-19 on tertiary school students' academic performance in Enugu state?
- 2. What are the consequences of covid-19 on tertiary school student's academic performance in Enugu state?

RESEARCH METHOD

Research **Design**

The research design adopted for this study was a survey design.



Area of the Study

This study was carried in Enugu State. Enugu State is one of the states in the eastern part of Nigeria located at the foot of the Udi Plateau. The population of the study comprises all the 13, 304 of all third (300L) year students from the thirteen (13) tertiary institution in Enugu State. (Source: Statistics and Record Units of Three institutions Under Study; 2020 data) The sample size for the study is 387 respondents. It is determined using Taro Yamane statistical formula. 129 students were selected using simple random sampling techniques. the researcher will draw 129 students in each of the three sampled institutions namely: Peace Land College of Education PCE, Enugu State University of

Science and Technology ESUT and Institute of Management and Technology Enugu (IMT). This made up 388 students as respondents in Enugu state.

The instrument used for data collection was questionnaire. The instrument used was face validated. Reliability test and retest was done using cronbach alpha.

The statistical tools used in the data analysis was mean in order to determine the degree of respondents agreement/disagreement and each of respondent statements in the questionnaire.

Any of the respondent therefore that had mean score of 2.5 or above was regarded as agree while any response with mean score of below 2.5 is regarded as disagreed

Results

Research Ouestion One

What are the effect of covid-19 on tertiary school students' academic performance in Enugu state?

Table 1: Mean Responses on the effect of covid-19 on Tertiary School students academic performance.

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S/N	ITEMS	SA	A	SD	D	N	\mathbf{X}	REMARK	
		4	3	2	1				
1	Covid-19 has led to the closing of schools for a long time.	190	100	50	48	388	3.1	A	
2	Covid-19 has led to longer years in the university for the young graduates.	190	80	78	40	388	3.0	A	
3	Destabilizing academic calendar.	150	180	25	33	388	3.1	A	
4	It has made the tertiary institutions to forcefully adopt online/virtual education system	195	120	50	45	388	3.3	A	
5	It has led to undergraduates not being mobilized for NYSC a whole year.	200	100	55	33	388	3.2	A	



Table 1 shows that items 1-5 have the mean score of 3.1, 3.0, 3.1, 3.3 and 3.2 respectively and were above cut off point 2.5 and above. Therefore were significant and accepted. This shows that the items above are the effect of covid-19 on tertiary school students academic performance.

Research Question 2

What are the consequences of covid-19 on tertiary school student's academic performance in Enugu state?

Table 2: Mean Responses the consequences of covid-19 on tertiary school student's academic performance in Enugu State.

S/N	ITEMS	SA	A	SD	D	N	X	REMARK
		4	3	2	1			
6	Covid-19 has led to the interruption of teaching of students in Enugu State as a result of lockdown measure.	150	180	25	33	388	3.1	A
7	With the emergence of covid-19, tertiary institution students are deprived the opportunities for academic growth and development due to lockdown measure and short semesters.	150	150	44	44	388	3.0	A
8	Because it coincides with a key assessment period, it has led to examinations postponed or cancelled as a result of covid-19.	200	150	23	15	388	3.3	A
9	Covid-19 lockdown has led to the decline in cognitive ability of students.	190	100	50	48	388	3.1	A
10	Some students could not continue with their studies after the lockdown leading to drop-out	190	100	58	40	388	3.1	A

Table 2 shows that items 1-5 have the mean score of 3.1, 3.0, 3.3, 3.1 and 3.1 respectively and were above cut off point 2.5 and above. Therefore were significant and accepted. This shows that the items above are the consequences of covid-19 on tertiary school students academic performance

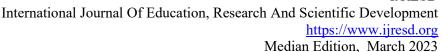
Summary of Findings

The findings from the study shows that:

- 1. Covid-19 has led to the closing of schools for a long time and also destabilized school calendar.
- 2. Some students could not continue with their studies after the lockdown leading to drop-out.

Research Question one sought to find out the effect of covid-19 on tertiary institution students academic performance. The findings showed that Covid-19 has led to the closing

of schools for a long time, Covid-19 has led to longer years in the university for the young graduates, covid-19 destabilized academic calendar. It has made the tertiary institutions to forcefully adopt online/virtual education system and it has led to undergraduates not being mobilized for NYSC a whole year. The findings of the study showed that COVID-19 has negatively affected the performance of students in many aspects such as their ability to perform well in each course activity, their performance in doing assignments, and their





grades. It is in line with the findings of studies conducted by (Ofojebe 2022 whose findings revealed that COVID-19 affected the performance academic of students. Furthermore, the findings of a study conducted by Sintema (2020) support the result of the present study indicating that COVID-19 destabilized academic calendar. Similarly, other studies conducted by (Oyinloye, 2020) confirming that COVID-19 has negatively affected the education system of Nigeria, particularly the performance of students.

Research Question Two anchored on the consequences of covid-19 on students' academic performance and it showed that; Covid-19 has led to the interruption of teaching of students in Enugu State as a result of lockdown measure, with the emergence of covid-19, tertiary institution students are deprived the opportunities for academic growth and development due to lockdown measure and short semesters, because it coincides with a key assessment period, it has led to examinations postponed or cancelled as a result of covid-19, covid-19 lockdown has led to the decline in cognitive ability of students and some students could not continue with their studies after the lockdown leading to drop-out. This finding confirms the study carried out by Mahdy, (2020) who indicated that COVID-19 has affected the performance of students and it varies between males and females. Therefore, this finding supports the idea and personal experience of the researcher who had indicated that due to the covid-19 many students could not remember what they were taught before the emergence of the lockdown. The findings of a study revealed that many students did not have adequate technological skills due to decline in their cognitive ability female (Aristovnik, 2020). From this finding, it can be implied that COVID-19 has affected the academics of many students as many could not continue with their education due to the decline in economic activities as many students could not continue with their academics and have to drop out. This shows that covid-19 had a significant effect on students' academic performance.

Recommendations

Based on the above findings the study posited the following recommendations.

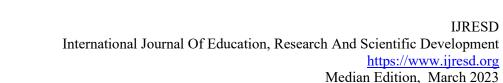
- 1. The government should increase the funding of secondary schools in next year's budget to allow them to manage all the damages caused by the COVID-19 school close down.
- 2. The Nigeria government should direct all the tertiary institutions to extend physical teaching, conduct online teaching and jointly solve new problems that may arise in the teaching process.
- 3. The government should reduce the maximum number of lessons per week for lecturers. This would afford them adequate time to prepare and deliver the content effectively and efficiently.

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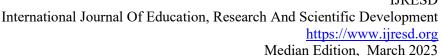


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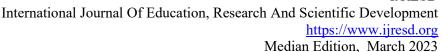




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