

## Effect of COVID-19 Pandemic Lockdown on Education in Northern Nigeria

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### Abstract

This study employs descriptive survey method to investigate the effect of novel covid-19 pandemic on educational system in northern Nigeria through lockdown enforcement to avoid students being infected, and suppress the spread of the virus. Data were collected from three states of northern Nigeria. Each state was randomly selected from each northern geopolitical zone (North-central, North-west and North-east). Students of higher institutions in these three states were the participants. Those institutions include Federal Polytechnic, Nasarawa, Nasarawa state, Federal University, Gusau, Zamfara state and Federal Polytechnic, Mubi, Adamawa state respectively. The results revealed that schools in these regions were closed down due to Covid-19 pandemic outbreak. The results further revealed that most places in the region experienced complete lockdown or partial lockdown, while few places experienced no lockdown at all. In addition, more than half of the students from each of the three zones investigated indicated that they usually read their academic materials while they were staying at home during the lockdown, while the remaining students indicated that they did not read. In their study at home, most of them used lecturer's notes and internet facilities to study, while few of them used textbooks.

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## **Background to the Study**

In Nigeria, schools across the country were closed down in March when people and the government were encompassed with fear by the deadly COVID-19 pandemic virus, which emanates from one of the provinces called Hubei in China. This current and deadly virus has been reported to be found in many countries as a result of its nature of rapid spreading. Symptoms exhibited by some victims before their deaths and the cases of high rate of death toll across the world were also reported by different concerned bodies such like Johns Hopkins University (Velavan and Meyer 2020; CDC, n. d). Nigeria is not exceptional to the severe hit of the virus as many cases of victims and deaths were reported across the country by the National Center for Disease and Control (NCDC, 2022). Apart from closing down the schools as a measure to suppress and stop the spread of the infection caused by the virus, other necessary and preventive measures which government immediately imposed on the society included working from home, observance of social distance, regular washing of hands, use of face masks, and establishment of isolation centres, among others (WHO, 2020).

The emergence of COVID-19 pandemic actually posed adverse effects on every facet of the societal activities in Nigeria and the world at large through the necessary measures such as lockdown and restriction of movement imposed on the public in order to curtail the spread of the virus. In this regard, students at all levels of education in Nigeria and the other parts of the world were actually hit as the schools were closed down, and they were asked to stay at home by the instruction of the governments through ministry of education to avoid spreading and being infected by the virus (Agbele and Oyelade, 2020; Tumwesige, 2020). Andreas, (2020) adds that most hit by the virus were students from disadvantage backgrounds, and they were completely cut off from academic activities when their schools were shut down, while the students from privileged backgrounds, supported by their parents could find their way past closed school gates to alternative learning opportunities. Moreover, the current pandemic outbreak had actually exposed numerous inadequacies, lapses and inequities in our educational systems ranging from access to the broad-band computers required for online education. Also, ranging from the supportive environments needed to focus on learning to the misalignment between resources and needs. Furthermore, the lockdown and restriction of movement in response to the spread of COVID-19 virus had interrupted conventional schooling in Nigeria as the schools were closed down. In addition, many stakeholders who made concerted efforts to ensure that learning persisted during the period of the virus outbreak had their efforts all in vain. But some students who had little resources continued learning distantly through internet, television and radio while large number of them who could not utilize these media engaged themselves with text books, note books and other instructional materials. Some students who were not familiar with digital learning resources or did not have access to the internet facilities or lacked the resilience to adjust to new instructional concepts and modes of learning or lacked the ability to learn on their own were at the peril of falling behind. On the side of the instructors, in some places, teachers had to adapt to new modes of teaching delivery which they had not been trained for.

In the face of COVID-19 pandemic outbreak, few institutions that have internet facilities quickly deviate from face-to-face leaning to online learning through which the privilege students took the advantage, and were taught, assessed and examined irrespective of wherever they were at the period, and while the less privileged ones were left out completely (UNESCO, 2020; Andreas, 2020). Though, the depth and severity of the pandemic issue varied from one location to another across the country as the measures taking by the government to suppress and curtail the spread were not taken serious by some people and even government itself. Daniel (2020) suggests that in an effort to build up capacity to teach remotely, schools and colleges should take the benefit of asynchronous learning, which works best in digital formats.

Obviously, Nigeria has been experiencing a decline in education standard for three decades, and the occurrence of COVID-19 crises has made it worse. The poor standard of educational system can be observed in the students' academic performance, their attitudes towards their studies, and the attitude of the government towards education (Adeaga, 2012; Bayo, 2019). The emergence of COVID-19 pandemic would definitely contribute significantly to the worsening of the situation as the academic activities have been hampered and severely hit by the necessary measures which were observed. Okwuosa and Modibbo (2021) explained that the occurrence of COVID-19 pandemic in Nigeria had revealed the poor state of infrastructure and facilities in the health sector, and also exposed the reality of the dilapidation and poor funding of the education sector. In addition, they observed that no other area has suffered the impact of COVID-19 pandemic like education and health sectors. They further revealed that many countries have easily adapted and switched over to virtual classes due to technological and scientific development, where radio and television were used during the hit of COVID-19 to pass teaching instructions to the students. But in Nigeria, it was not only difficult but also impossible to open the schools virtually due to poor infrastructure and lack of facilities essential to run virtual classes. Moreover, poor delivery of internet network, unsteady power supply, high cost of bills, high cost of mobile data and among others are the challenges to the successful conduct of education virtually. In addition, many Nigerians are living below poverty line and it is difficult for them to afford modern technology of communication, radio and television.

Lockdown of schools and asking the students to stay away at home without adequate built environment, and the lack of strict adherent to the preventive measures would push a good number of students towards all manner of social vices that would have negative effects on the society. Those consequences of closing down of schools to avoid spreading of the deadly virus may not disappear by the time the schools are opened for students to come in, and they would thus exhibit in the school environments. In addition, there is overwhelming evidence that the longer the children are out of school, the greater the risk of social vices such as violence, rape, child marriages, child labor, prostitution and other life-threatening criminal activities they are exposed to (UNESCO, 2020a as cited in Tumwesge, 2021).

Undoubtedly, some students could also make use of the opportunity of lockdown of schools to learn skills through internet or otherwise in order to become self-reliant during and after schooling. This would also go a long way to reduce poverty, unemployment from the society and boost the socio-economy. On the other hand, those students who know the value of education would use the opportunity of staying at home to study more in the area of their learning discipline, by exploring internet facilities, reading their lecture notes or text books.

Andreas (2020), presents that in a short term, some countries such as United Kingdom, Australia, Canada, United States, Italy among others would implement immediate financial assistance to support students and education system to cope with the disruptions and economic impact of school and university closures. In addition, all too often government funding on education is fluctuated in response to external shocks as governments reprioritize investments. Moreover, the slowdown of economic growth associated with the spread of the COVID-19 virus may affect the availability of public funding for education in OECD and partner countries as tax income declines. And emergency funds would be required, and directly funneled into supporting increasing healthcare and welfare costs. IIEP-UNESCO (2020) views the current crisis caused by the COVID-19 as it might negatively affect education budgets more swiftly as public revenues decline sharply. Therefore, governments would need to quickly review the prioritization on education in national budgets. In the same vein Al-Samarrai et al. (2020) predicted that there would be slower growth in government spending in the years ahead due to COVID-19 pandemic outbreak. In addition, education spending would continue to grow but at significant lower rate than before the pandemic occurrence if the share of government spending committed to education is to remain untouched. Okwuosa and Modibbo (2021), reveals that in year 2020 the federal government of Nigeria allocated the sum of 568 billion naira (approx. USD 1.5 billion) to education. To combat the spread of COVID-19 pandemic, however, this amount was reduced to 509 billion naira (approx. USD 1.34 billion). This reduction pressurized public schools into dismissing many temporary staff. In addition, skyrocket of student school fees in various institutions thereby creating increasing inequality in education.

Impacts of COVID-19 pandemic on education have long lasting consequences, which if not quickly addressed, it would reverse hard-won gains even in gender equality (UN-Women, 2020). In addition, it was estimated that an addition of 11million girl students perhaps would stop going to school by the end of the COVID-19 crisis. Also, evidence from a previous report pointed out that many of the girls would not return to school at the end of the crisis. And this will create a wide education gender gap that will have serious implications on women. Reports have revealed that many children were out of school even before the pandemic outbreak due to bad influence, lack of fund, child labor, climate change, conflict, hunger, academic difficulty and amongst others; and more have dropped out due to the pandemic (Mitha, 2022; Okwuosa and Modibbo, 2021; Tributaries International 2022; Their world, 2022). In the study carried out to investigate the effect of COVID-19 school close down on academic program of senior secondary schools in Abaji

Area Council in Abuja, the results of the study revealed that COVID-19 close down of school severely affect the academic program and extra-curriculum activities in the schools (Ogunode, 2020).

### **Objectives of the Study**

This study is carried out with a view to understand:

1. The level of impact of COVID-19 lockdown on education in northern Nigeria.
2. The degree of COVID-19 lockdown in northern Nigeria.
3. The student's commitment to their studies during lockdown.
4. The form of academic leaning means among the students during lockdown.

### **Research Questions**

- Q1. Was your school closed down because of Corona Virus Pandemic?
- Q2. To what extent was the lockdown where you live during the COVID-19 outbreak?
- Q3. Did you study your academic materials at home during the Lockdown?
- Q4. What was your means of study when school was closed down due to COVID-19 Lockdown?

### **Methods**

This study employed descriptive survey research method to investigate the impact of COVID-19 pandemic through lockdown on education in the northern part of Nigeria. Like education system of the other part of the country and the world at large, northern Nigeria's education experienced severe hit of COVID-19 pandemic through the lockdown and restriction of movement. The entire Northern part of Nigeria serves as the population of this study, and it comprises three geographical zones which include North-east, North-west and North-central with 2019 total estimated population of 128.17millions (Ripples Nigeria, 2022). Each of these zones has states under them that include North-east comprises 6 states, North-west comprises 7 states, while North Central comprises 7 states as shown in Table 1. The sample consists of three states in which a state was drawn from each geographical zone by random sampling technique. Those states that make up the sample include Nasarawa (North-central), Adamawa (North-east), and Zamfara (North-west), and the students of a higher institution in each of these states were used to obtain information by administering questionnaire to them. Those institutions include Federal Polytechnic, Nasarawa (FPN) in Nasarawa state; Federal Polytechnic, Mubi (FPM) in Adamawa state and Federal University, Gusau (FUG) in Zamfara state. This study was carried out after the lockdown was lifted and students were back to school. Figure 1 shows the northern part of Nigeria where the green portion shows the northern Nigeria.



**Table 1:** Nigeria's Northern Geographical Regions with their States

North central	Northeast	Northwest
Kogi	Adamawa	Kano
Niger	Taraba	Kebi
Kwara	Yobe	Jigawa
Plateau	Gombe	Kasina
Benue	Borno	Sokoto
Abuja	Bauchi	Kaduna
Nasarawa		Zamfara

**Source:** About Nigerian (2020)

**Figure 1:** The map of Nigeria



### Research Instrument and Data Collection

Research questionnaire for this study was structurally produced in line with the current COVID-19 pandemic issue. It contains four research questions which the respondents would read and respond to by choosing from the options provided for each question. In this study, 150 questionnaires were sent to each institution of higher learning in each of the sample's states such as Federal Polytechnic, Nasarawa (FPN) in Nasarawa state; Federal Polytechnic, Mubi (FPM) in Adamawa state and Federal University, Gusau (FUG) in Zamfara State. Their students were administered questionnaires to read and respond to the research questions by choosing from the options provided. After collecting the data, they were then statistically analysed by frequency counting and percentage.

### Results and Discussions

In the context of outbreak of COVID-19 pandemic many measures such as restriction of movement, lockdown of schools, distancing, covering of nose and mouth amongst others were observed in order to suppress and prevent the spread of the virus. Some of the results of this study are presented using Analysis of Variance (ANOVA) and bar charts.

**Table 2:** Treatment responses from the survey which comprise of Yes, No and Undecided Between-Subjects Factors

		Value Label	N
TRT	1	Yes	3
	2	No	3
	3	Undecided	3
BLK	1	FUG	3
	2	FPN	3
	3	FPM	3

Table 2 shows the treatment responses from the survey which comprise of Yes, No and Undecided. The Blocks are the locations of the survey and they include FUG, FPN and FPM.

**Research question:** Was your school closed down because of corona-virus pandemic?

**H<sub>0</sub>:** School was not closed down because of corona-virus pandemic

**H<sub>1</sub>:** School was closed down because of corona-virus pandemic

**Level of significance ( $\alpha = 0.05$ )**

**Table 3:** Results for the research question which asks, 'Was your school closed down because of Corona Virus pandemic?'

Dependent Variable: Closed down

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	51495.333 <sup>a</sup>	5	10299.067	247.178	.000
TRT	30754.667	2	15377.333	369.056	.000
BLK	4.667	2	2.333	.056	.946
Error	166.667	4	41.667		
Total	51662.000	9			

From Table 3, F-statistic of the responses is 369.056 with p-value = 0.000. Since P-value (0.000) is  $< \alpha$  (0.05), we reject H<sub>0</sub> and conclude that School was closed down because of corona-virus pandemic. This is evident from the Post-Hoc test using Fisher LSD test that is shown in Table 4.

**Table 4:** Post-Hoc test (Fisher LSD)

Dependent Variable: Closed down  
LSD

(I) TRT	(J) TRT	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Yes	No	124.67*	5.270	.000	110.03	139.30
	Undecided	123.33*	5.270	.000	108.70	137.97
No	Yes	-124.67*	5.270	.000	-139.30	-110.03
	Undecided	-1.33	5.270	.813	-15.97	13.30
Undecided	Yes	-123.33*	5.270	.000	-137.97	-108.70
	No	1.33	5.270	.813	-13.30	15.97

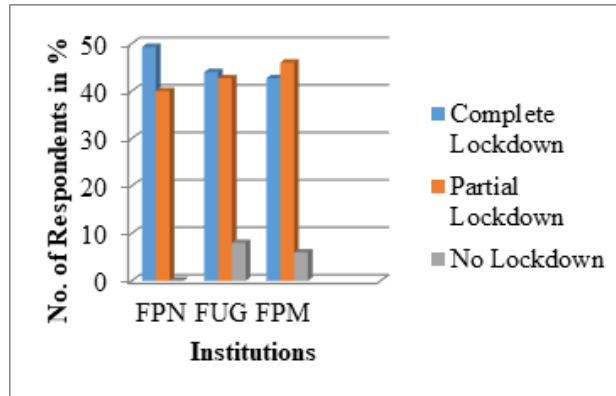
\*. The mean difference is significant at the 0.05 level.

From Table 4, the mean difference between response yes and other responses is significant at 5% level. This infers, that there exists a significant mean difference between them. Hence, it can be asserted that respondents have strong conviction that school was closed down because of corona-virus pandemic.

The results shown in Figure 2 is for the research question that is meant to know the extent of the lockdown in the regions due to outbreak of COVID-19 pandemic. In the North-central, North-west and North-east, the results reveal that 49.3%, 44% and 42.7% of the respondents respectively indicate that they experienced lockdown, while 40%, 42.7% and 46% of the respondents respectively indicate that they experienced partial lockdown during the outbreak of the virus. In addition, 0.1%, 8% and 6% of the respondents from North-central, North-west and North-east respectively account that there was no lockdown where they live. The results from the three zones actually reveal that complete lockdown and partial lockdown were observed in most places in the region, but at different degrees or depth, while few places in the region did not experience lockdown at all.



**Figure 2:** Results for the research question which asks, 'to what extent was the lockdown where you live during the COVID-19 outbreak'?



### Research Question

Did you study your academic materials at home during lockdown?

$H_0$ : Respondents did not study their academic materials at home during lockdown.

$H_1$ : Respondents did study their academic materials at home during lockdown.

Level of significance ( $\alpha = 0.05$ )

**Table 5.** Results for the research question which asks, 'did you study your academic materials at home during the Lockdown'?

Dependent Variable: Academic Materials

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	29389.333 <sup>a</sup>	5	5877.867	5038.171	.000
TRT	8648.667	2	4324.333	3706.571	.000
BLK	4.667	2	2.333	2.000	.250
Error	4.667	4	1.167		
Total	29394.000	9			

From Table 5, F-statistic of the responses is 3706.571 with p-value = 0.000. Since P-value (0.000) is  $< \alpha$  (0.05), we reject  $H_0$  and conclude that Respondents did study their academic materials at home during lockdown. This is evident from the Post-Hoc test using Fisher LSD test which is shown in Table 6.

**Table 6:** Post-hoc test (Fisher LSD)

Dependent Variable: Academic Materials  
LSD

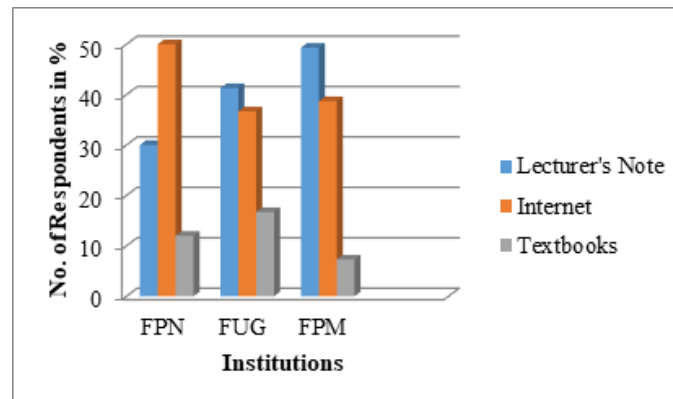
(I) TRT	(J) TRT	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Yes	No	32.33*	.882	.000	29.88	34.78
	Undecided	75.67*	.882	.000	73.22	78.12
No	Yes	-32.33*	.882	.000	-34.78	-29.88
	Undecided	43.33*	.882	.000	40.88	45.78
Undecided	Yes	-75.67*	.882	.000	-78.12	-73.22
	No	-43.33*	.882	.000	-45.78	-40.88

\*. The mean difference is significant at the 0.05 level.

From table 6, the mean difference between response yes and other responses is significant at 5% level. This infer, that there exists a significant mean difference between them. Hence, it can be asserted that some of the respondents did study their academic materials at home during lockdown.

The results in figure 3 reveal the academic materials which students used to study at home during the lockdown. From the results, north central, northwest and northeast account for 30%, 41.3% and 49.3% of the respondents respectively who signified that they used their lecturers' notes to study at home during lockdown, while 50%, 36.7% and 38.7% of the respondents respectively indicated that internet was the source of academic materials they studied at home during the lockdown. In the same vein, 12%, 16.7% and 7.3% of the respondents respectively indicated that they studied their textbooks while staying at home during the lockdown. The results from the three zones reveal that those students who used lecture's notes and internet to study at home were more than those who used textbooks. In addition, students FPN who used internet to study at home were more than those who used lecture's notes and textbooks, while in FUG and FPM, students who depended on lecturer's notes were more in number compare to those who used internet and textbooks. In the region, those who studied through textbooks were the least.

**Figure 3:** Results for the research question which asks, 'What was your means of study when school was closed down due to COVID-19 Lockdown?'



### Conclusion

Complete and partial lockdowns were observed in most places of the region, while few places did not observe lockdown at all. When students stayed at home during the lockdown, most of them studied their academic materials while few did not. Those that studied at home during the lockdown used their lecturers' notes, internet facilities and textbooks as study materials, but the least study academic materials used by the students were textbooks. Closing down of schools as one of the necessary measures imposed to suppress and stop the spread of COVID-19 pandemic caused academic interruption which in turns cause adverse effect on students' academic performance in the region. This would also create wider education difference or gap between the north and south regions of Nigeria.

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