Effects of Covid-19 on the Academic Performance of Students in Tertiary Institutions in Ekiti State

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Abstract

The study investigated the effects of Covid-19 pandemic on the academic performance of students in tertiary institutions in Ekiti State. The study examined the academic performance of students before Covid-19 and Post-Covid effect. Expost facto design was adopted for this study. The population for the study comprised all students of public tertiary institutions in Ekiti State. Stratified random sampling technique was used to select the sample result of 100 students in any of the general course in the selected tertiary institution. Sample of the study comprised 200 level students in any of the selected two tertiary institutions in Ekiti State. Data was gathered from the concerned institutions on the academic performance of students for further analysis in the study. A reliability co-efficient of 0.75 was obtained through test and re-test method to ascertain its reliability. One null hypothesis was raised and tested at 0.05 level of significance. The results of students were collected before and after the covid-19 period. Data collected were anlysed using t-test statistics. The results revealed that the entire hypotheses were rejected in all the institutions. The paper recommends that, the government should provide adequate infrastructural facilities that will support online learning in all the tertiary institutions in Ekiti State to prevent any eventuality of a future close down of institutions because of pandemic, Lecturers should encourage students centred method of teaching so that student can contribute to the teaching. Government should encourage lecturers by paying them all the back logs of salaries arears. Lecturers should come up with new strategies to cover up the teaching and learning gap created as a result of COVID-19 lockdown.
Keywords: COVID-19, Institution, pandemic, infrastructural facilities, Academic performance.

Introduction

Tertiary institutions in Nigeria throughout the year 2020 faced devastating epidemics that have disrupted all academic activities while many students have been affected negatively. Since the Coronavirus outbreak in 2019, students' learning styles have changed dramatically. Quick understanding seems difficult among many

students due to the Covid-19 lockdown. The emergence of Covid-19 has suddenly changed the teaching approach from face-to-face (traditional) to remote learning (online). Many things have change in teaching and learning approaches after the resumption of the Covid-19 total lockdown, students have been exposed to different types of learning approaches like online teaching and blended learning. Compared to the traditional system of learning approach, a common phenomenon, many tertiary institutions have adopted online learning systems for teaching and learning due to the Covid-19 pandemic. UNESCO IESALC. (2019) reported that the online teaching approach is no longer new before the covid-19 outbreak as many tertiary institutions have stopped face-to-face teaching and integrating online learning and blended learning into the system. Mandl and El Said (2021) stated that COVID-19 has dramatically reshaped global education. Millions of learners were affected by educational institution closures due to the pandemic, which resulted in the largest online movement in the history of education. Since the inception of the Covid-19 outbreak, the delivery of teaching and learning has taken another dimension. Covid-19 has led to the sudden shift from classrooms in many parts of the country to virtual learning and digital strategies.

Oluwatoyin (2020) revealed that teachers are getting prepared to teach with new instructional strategies to minimise the effect that COVID-19 may pose on students' performance in examinations as soon as the COVID-19 curve is flattened. Oluwatoyin further stated that some teachers who took part in the study expressed their concern about the lack of e-learning facilities in their schools and they also complained about instability and consistent power failure in the country. They acknowledged that stable electricity in Nigeria would facilitate e-learning by allowing teachers to continue teaching and even conduct alternatives to practical classes. They believe this would increase students' performance in no small measure in their forthcoming examinations.

Parents' good economic status and a better living standard are observed to facilitate or contribute to students' academic performance. When students cannot pay the school fee when due and are sent away from the lecture room, such students may not be able to benefit from learning compared to those students from a well-to-do home that are able to pay their school fees on time. Oluwatoyin (2020) stated that many of the parents who are civil servants (working with the government) had not been paid their salaries while most of those working with the private establishment have been laid off due to the devastating results and negative economic impact caused by COVID-19 pandemic. This has contributed in no small measure to poverty. Therefore, it is difficult for many parents to feed their family and hence, they cannot afford to buy data for the children or ward to participate in online classes and also download educational materials sent to them by their teachers

Virtual learning during the total lockdown would have helped tertiary institution students tremendously if all the facilities needed by the students were available but many students encountered different challenges in participating in any virtual learning. If there is a smooth running of face-to-face or virtual academic activities, students' academic performance would be improved. Some students during the lockdown had different challenges like getting a mobile phone for effective communication, lack of computer skills to effectively participate in online learning and poor economic status of their parents. During the lockdown, students primarily raised concerns about the above mention challenges which affected their participation and effectiveness in the alternative teaching method during the lockdown. This seems to be the cause for the variation in students' performance before the covid-19 outbreak and after the covid-19 outbreak. Aleksander (2020) revealed that a lack of computer skills and the perception of a relatively high workload prevented students from perceiving a higher performance while adapting to the new normal distance education.

In the same vein, online learning would have been the best option for the student during the total lockdown but some students seem not to have enjoyed the virtual learning because of some challenges encountered during the online learning which are varied. Mahdy (2020) stressed that the most common problems associated with online education, in general, included the availability of the internet in provincial and rural areas, the speed and cost of the internet, the availability of electronic devices to access the internet, and the lack of interaction between students and lecturers. Mahdy further concluded that the COVID-19 pandemic lockdown affected the academic performance of most participants by about 96.7% with varying degrees.

Students' performance results from their intelligence quotient and different ability regarding teaching and learning. Individual learning ability and capability differences also determine students' academic performance

in any subject. Students who have a very good retentive memory and can remember what has been taught for a long period (Long term memory). Oluwatoyin (2020) affirmed students' performance is a result of individual differences in their intelligence quotient (IQ). The author further stated the effect of the covid-19 pandemic on the students, bearing in mind their different abilities regarding teaching and learning. The issue of individual differences in terms of their intelligence quotient (IQ) and rate of understanding and learning differs from one student to the other as well as the strategies teachers employ to impart knowledge and prepare them for external examination. Students with short-term memory may find it difficult to balance academic activities because they might have forgotten everything they were taught before the shutdown of institutions. Observations have shown that students' performance was above average with about 68% before the lockdown.

Covid-19 seem to have made many students lazy because of long stays at home. Many factors may have been responsible for the poor performance of students after the Covid-19 pandemic. Due to the long lockdown, some students' reading and study habits seem not encouraging because many students were observed to have engaged themselves with other activities during the lockdown that was not part of their academic experience. Online lecturers during the total lockdown seem to have prepared many students to cope with their academics after the covid-19 lockdown because those who attended seemed to be effective and participated during the lecture.

The results of Oluwatosin (2020) specified that COVID-19 would harm the education system in Nigeria, due to the effect of lost contact hours due to the early closure of schools across the Nation. The majority of the schools in Nigeria lack e-learning facilities to enable teachers to interact with their students at such a time as this, even in the few schools that have such facilities, the majority of the students are unable to access it as a result of epileptic power supply. This study also pointed out that if COVID-19 is not contained soon, it could destabilize final-year students. Ogunmodede, Ogunlade, and Ayide (2021) revealed that the retention of students drastically dropped after the total lock down from the recovery of covid-19 pandemic.

The session before students will go on compulsory vacation was normal and accommodate all the activities, but immediately after covid-19, the session became short and many students could not meet up with the institution's standards by cutting short their semester and session. Many institutions are in haste to finish up the session or semester after the resumption of the total shutdown to meet all their staff obligations and be able to pay their salary. This contributes to the short semester and session after resuming the Covid-19 lockdown. Gonzalez, Rubia, Hincz, Comas-Lopez, Subirats and Fort S (2020) also discovered that covid-19 confinement significantly positively affects students' academic performance.

Statement of the Problem

The school lockdowns that started in the spring of 2020 reduced instructional and learning time, which are known to impede student performance with disparate impacts on different groups of students. Many students are observed to have forgotten what they have learnt before covid-19 total lockdown. Since there was a wide gap between the students and the lecturer due to the total lockdown, many students found it difficult to connect to their lecturer during the lockdown through online learning, many didn't have internet facilities or mobile or computer devices to use for online learning. As a result of the long space between the lecturer and students, many students are observed to have engaged themselves in other activities apart from academic activities. Long total lockdown also contributes to the student's laziness in class, while the lecturer is lecturing the students, some are observed to be indisposed and lack good concentration during the lecture. It is a general belief that students can easily forget when they fail to practice what they have learnt. Few per cent of students revised what they had learnt.

Purpose

The study investigated the effects of the Covid-19 pandemic on students' academic performance in Ekiti State tertiary institutions. The study also examined the performance of 200-level students in the general course before the Covid-19 outbreak and after covid-19 lockdown. The comparison was made between 200 level Education

Students who completed the first semester before the institutions would shut down and the same 200 students who completed the same course in the second semester after the total lockdown.

Research Questions
1. What is the difference between the mean score of students taught before Covid-19 and After Covid-19 in the General Education course (Educational Technology)

Research Hypothesis
The following research hypotheses were tested in the study
1. There is no significant difference in the mean score of students taught before the Covid-19 lockdown and after the lockdown

Methodology
The study examined the academic performance of students before Covid-19 and Post-Covid effect. An expost facto design was adopted for this study. The population for the study comprised all students of public tertiary institutions in Ekiti State. A stratified random sampling technique was used to select the sample result of 100 students in any general course in the selected tertiary institution. The study sample comprised 200 level students in any of the selected two tertiary institutions in Ekiti State. The scores of the result in Educational Technology course were collected from Bamidele Olumilua University of Education, Science and Technology and Ekiti State University, Ado-Ekiti. The scores were gathered from the past examination before the total lockdown and scores of the examination after the lockdown. Data was gathered from the concerned institutions on students' academic performance for further analysis in the study. A reliability coefficient of 0.75 was obtained through the test and re-test method to ascertain its reliability. One null hypothesis was raised and tested at a 0.05 level of significance. The results of students were collected before and after the covid-19 period. Data collected were analysed using t-test statistics. Mean and standard deviation was used for the research question while t-test statistics were used to analyse the hypothesis.

Results

Question 1: What is the difference between the mean score of students taught before Covid-19 and After Covid-19 in the General Education course (Educational Technology)

Table 1: Mean and Standard deviation of students taught before and after covid-19 lockdown

Groups	N	Mean	S.D	Mean Diff.
Before Covid-19	200	56.78	7.53	
After Covid-19	200	49.2	12.90	7.53
Total	400			

Table 1 shows the mean score performance of students taught before covid-19 pandemic and after covid-19 pandemic. The mean scores before covid-19 pandemic are 56.78 while the mean scores after covid-19 pandemic are 49.2. Thus, students appear to perform better in their examination before covid-19 total lockdown with the highest mean of 56.78. therefore, the mean difference between students' performance before covid-19 and after covid-19 pandemic is 7.53. The reason may be the total lockdown of tertiary institutions, which may affect students' academic activities.

Hypotheses Testing

Hypothesis 1: There is no significant difference in the mean score of students taught before the Covid-19 lockdown and after the lockdown

Table 2: t-test analysis for the Performance of Students taught before and after covid-19 lockdown

Groups	N	Mean	S.D	Df	t_{cal}	P_{value}	Remark
Before Covid-19	200	56.78	7.53				
After Covid-19	200	49.2	12.90	398	7.35	.000	Significant

*P<0.05

Table 2 shows that the t_{cal} value of 7.35 is significant because of the P_{value} (.000) <0.05 level of significance. This implies that the null hypothesis is rejected. Hence, there was a significant difference in the mean scores of students taught before covid-19 lockdown and after covid-19 lockdown. The result suggested a statistically significant difference in students' performance before covid-19 lockdown and after covid-19 lockdown. In addition, despite online learning being introduced during the lockdown, many students appear to have forgotten what they learnt after resuming the total lockdown.

Discussion
The study's findings revealed that the performance of students before the covid-19 lockdown was slightly increased than that of students after the total lockdown. The mean score of students before the covid-19 outbreak was slightly higher than that of students after the covid-19 outbreak. There was a significant difference between the performance of students before the total lockdown and after the total lockdown. The above was confirmed by hypothesis one, which revealed a significant difference in the mean score of students taught before and after the Covid-19 lockdown and after covid-19 lockdown. The reason for this may be that some students do not have the necessary facilities to meet online during the total lockdown to bridge the gap during the lockdown. Students may have also forgotten what they had been taught before the lockdown. The finding is in consonance with the study Oluwatosin (2020) who specified that COVID-19 would have a negative impact on the education system in Nigeria, due to the effect of lost contact hours as a result of the early closure of schools across the Nation. Ogunmodede, Ogunlade and Ayinde, (2021) also confirm that the retention of students after the covid-19 was drastically dropped. The finding also revealed that the poor performance of students after the covid-19 lockdown may be due to the non-availability of facilities for online learning during the lockdown to keep students abreast of their courses. This is supported by the findings of Mahdy (2020) stated that the most common problems associated with online education, in general, included the availability of internet in provincial and rural areas, the speed and cost of the internet, the availability of electronic devices to access the internet, and the lack of interaction between students and lecturers. Contrary to the finding, the result of González & De la Rubia, Kajetan, Comas-Lopez, Subirats, Laia & Fort, Santi & Sacha, Gomez. (2020) revealed the positive significant effect of COVID-19 confinement on students' performance. The results indicate that students obtain better scores in all kinds of tests performed after confinement begins.

Conclusion
It can be concluded from the finding of this study that the Covid-19 lockdown negatively impacts students' academic performance. The current study showed that the COVID-19 pandemic lockdown affected the academic performance of most students with varying degrees. Online education helps to keep students up and running with an opportunity for self-study. However, the main challenge online education faced during the total lockdown was the poor financial status of some students to get tools and data to participate in online learning. This among others affected many students to forget what they have learnt or find it difficult to memorise after the resumption.

Recommendations
Based on the findings above, it is recommended that:

Government should provide adequate infrastructural facilities that will support online learning in all the tertiary institutions in Ekiti State to prevent any eventuality of a future close down of institutions because of the pandemic, Lecturers should also encourage students centred method of teaching so that students can contribute to the teaching. Lecturers should develop new strategies to cover the teaching and learning gap created due to the COVID-19 lockdown.

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