



## **The Impact of COVID-19 on Education in Ghana**

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### **Authors' contributions**

*This work was carried out in collaboration between both authors. Author JLNU contributed substantially to the conception and design of the study, the acquisition of data and the analysis and interpretation. Author CBU drafted and provided critical revision of the article and final approval of the version to publish. Both authors read and approved the final manuscript.*

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### **ABSTRACT**

This study was intended to examine the effect of COVID-19 on education in Ghana. This study was guided by the following objectives; to evaluate the awareness of COVID-19 virus among students in Ghana, to examine the impact of COVID-19 on education in Ghana and to evaluate the after effect of COVID-19 epidemic on education system in Ghana. The study employed the descriptive and explanatory design; questionnaires in addition to library research were applied in order to collect data. Primary and secondary data sources were used and data was analyzed using the chi square statistical tool at 5% level of significance which was presented in frequency tables and percentages. The respondents under the study were 100 teachers and students of selected Senior High Schools (SHS) in Tamale metropolitan area of northern region of Ghana. The study findings revealed that COVID-19 pandemic has significant impact on education in Ghana; based on the findings from the study, schools want resources to reconstruct the loss in education through the epidemic.

**Keywords:** *Epidemic; COVID-19; impact; lockdown; virus.*

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## **1. INTRODUCTION**

Few months ago, the outbreak of the coronavirus disease in 2019, also known as COVID-19 was declared on 30th January 2020, by the Director General of World Health Organization (WHO). In 2019, there was nervousness about the effect of a US-China trade war. This was the US presidential elections and the famous Brexit on World Economy. Upon the justification of these, the IMF had projected weakened international growth of 3.4 percent. But COVID-19 – the sickness caused by SARS-CoV-2, a new strain of coronavirus from the SARS-COV strains–transformed the position suddenly. Due to nervousness and vagueness, and to normal valuation that firms' returns are expected to be reduced owing to the effect of COVID-19, international stock markets obliterated about US\$6 trillion in capital in a single week from 24<sup>th</sup> to 28<sup>th</sup> of February, 2020 [1]. The S&P 500 index missed more than \$5 trillion worth in the same week in the US, whereas the S&P 500's principal 10 companies had a mutual cost of over \$1.4 trillion (<https://www.reuters.com>), even though some of these were improved in the succeeding week. Some of the cost in rate was due to coherent assessment by investors that firms' profits would decline due to the impact of the coronavirus.

The COVID-19 epidemic far-reaching the earth has affected masses of students, whose school closings have further caught them, their families and teachers by disbelief. It means lost class altogether for some, whereas others are testing online learning frequently facing problems with online networks and also psychosocial well-being and motivational trials. These hitches point to a life-threatening gap in school-based exigency arrangement within wider education sector readiness planning and alternative management [2]. Education section readiness aims to shield students and educationalists, strategise for continuousness of education, and protect education segment reserves, all of which eventually contribute to supported flexibility through education. The Disease control Department of the Ghana Health Service's readiness and guidance for school-based epidemic proposed that school-based epidemics often increase community-wide epidemics; consequently, planning and working for these epidemics are a way of protecting not only the well-being of staff and students, but also of the broader community [1].

A considerable number of the worldwide guidance for schools involving the current COVID-19 epidemic emphasizes on keeping schools and teachers safe, physically fit over individual and ecological nonpharmaceutical interventions (NPIs). This comprises communication about everyday preventive activities like inspiring staff and students to remain home when they are sick, cover sneezes and coughs, washing hands frequently, and sanitizing regularly touched surfaces and items. Some schools in societies with isolated cases of the coronavirus are introducing community NPIs, such as practising social distancing among people at school to about three feet, thereby making attendance and sick-leave procedures more supple, deferring or withdrawing large school events and momentarily dismissing students [3].

### **1.1 Statement of the Problem**

The outbreak of the corona virus disease (COVID-19) has increased tension and anxiety among Ghanaian citizens. The virus, unlike other cases we have had in this country is highly transmittable with severe signs and symptoms. The question of how to offer excellence educational continuousness remotely that does not supports only learning, but also the psychosocial well-being of both educators and students is dangerous to active readiness and response [2]. The deficiency of research on guidance for planning educational continuousness is calamitous, as education is itself a type of psychosocial backing that encourages all-inclusive well-being during disasters. Planned investment in education-based psychosocial care and emotional and social learning for youth and children affected by disasters can aid them learn more eagerly. Indeed, psychosocial well-being is an important forerunner to education, and has a significant bearing on the imminent projections of both persons and societies [2].

This COVID-19 epidemic is confidently not the last epidemic that will pose threat to school continuousness, particularly given research on how climate change will impact infectious disease incidence. Schools necessity need to instantly inform their emergency readiness strategies by developing contingency strategies that not only address school-based preclusion and safety actions for epidemics, but also recognise ways to continue supporting and educating teachers and students if schools remain closed.

The objectives of the study are to ascertain the relationship between corona virus disease (COVID-19) and educational activity; and also, to ascertain the preventive strategies of COVID19 in educational sector. The study will also seek to ascertain the impact of COVID19 on education and help to determine the effect of corona virus disease (COVID-19) on the student well-being.

## **1.2 Research Hypotheses**

For the successful accomplishment of the study, the researcher formulated the following research hypotheses:

**H<sub>0</sub>:** There is no relationship between corona virus disease (COVID-19) and educational activity.

**H<sub>1</sub>:** There is relationship between corona virus disease (COVID-19) and educational activity.

**H<sub>0</sub><sup>2</sup>:** There is no impact of COVID19 on education.

**H<sub>2</sub>:** There is impact of COVID19 on education.

## **2. REVIEW OF RELATED LITERATURE**

### **2.1 Coronavirus**

Coronavirus disease (COVID-19) is an infectious disease caused by a new coronavirus belonging to the SARS-COV family. Most people infested with COVID-19 will feel mild to moderate respiratory illness and may recover without special treatment. Older people, and those with underlying health problems like diabetes, cardiovascular disease, cancer and chronic respiratory illness are more likely to develop grave illness. One of the important ways to contain and slow the spread is to intensify education on the mode of trans mission and the signs and symptoms of the disease. Guard yourself and others against infection by using an alcohol-based sanitiser regularly or washing your hands and not touching your face [4].

### **2.2 Effect of the 2019/2020 Coronavirus Epidemic on Education**

The 2019 coronavirus epidemic has affected educational arrangements globally, leading to the near-total closing of schools, colleges and universities. As of 27 April 2020, nearly 1.725 billion learners are presently affected owing to school closings in response to the epidemic. According to a monitoring report by UNICEF, one

hundred and eighty-six (186) countries are presently engaging national closures and are engaging local closures, impacting about 98.5 percent of students' population in the world. On 23 March 2020, Cambridge International Examinations (CIE) made a pronouncement that the annulment of Cambridge O Level, Cambridge IGCSE, Cambridge AICE Diploma, Cambridge International AS & A Level, and also Cambridge Pre-U examinations for the May/June 2020 series all over the world. International Baccalaureate exams have also been annulled [5].

School closings impact not only teachers, students and families, but have extensive economic and societal costs. School closings in response to COVID-19 have thrown light on numerous social and economic issues, including homelessness, digital learning, student debt and food insecurity as well as health care, access to childcare, housing, disability services and internet. The impact was severe for underprivileged families, and their children, causing intermittent learning, conceded nutrition, childcare complications, and resultant economic cost to families who could not work [5].

Efforts to stalk the spread of COVID-19 through non-pharmaceutical involvements and protective procedures such as self-isolation and social-distancing have sparked the extensive closure of all tertiary, second cycle and basic schooling in more than 100 countries. Previous epidemics impelled widespread school closings round the world, with varying stages of effectiveness. Mathematical modelling has revealed that spread of an outbreak may be delayed by school closings. Also, in some instances, the resumption of schools after a period of closings have caused increased infection rates. As closings tend to happen simultaneously with further intercessions such as communal gathering prohibitions, it can be problematic to measure the exact impact of school closings [5]. During the 1918-1919 influenza epidemic in the United States, school closings and public gathering prohibitions were linked with lesser total death rates. Cities that applied such interventions earlier had larger delays in reaching highest death rates. Schools closed for average period of 4 calendar week according to a study of forty-three (43) US towns' reply to the Spanish Flu. School closings were made known to reduce illness from the Asian flu by 90% throughout the 1957-58 outbreak, and up to 50% in governing influenza in the US, 2004-2008 [6].

Several countries fruitfully slackened the spread of the infection through school closings during the 2009 H1N1 Flu epidemic. School closings in Oita in Japan, were found to have effectively reduced the number of infected students at the peak of infection. However, school closure was not found to have meaningfully reduced the total number of infested students. Obligatory school closings and other social distancing actions were connected with a 29% to 37% decrease in influenza spread rates. Early school closings in the United States deferred the ultimate of the 2009 H1N1 Flu pandemic. Notwithstanding the general success of school closings, a study of school closures in Michigan found that district level reactive school closings were not active [1].

During the swine flu epidemic in 2009 in the United Kingdom, in an article titled "Closure of schools during an influenza pandemic" that was issued in the *Lancet Infectious Diseases*, a collection of epidemiologists recommended the closing of schools so that the course of the infection could be interrupt, slow further spread and also buy time to research and come out with a vaccine. Having studied earlier influenza epidemics plus the 1918 flu epidemic, the influenza epidemic of 1957 and the 1968 flu pandemic, they reported on the workforce and economic consequence school closing would have, mainly with a huge proportion of nurses and doctors being women, of whom half of them had children below sixteen (16) years. They also looked at the intricacies of the spread of the influenza in France throughout French school holidays and saw that cases of flu abridged when schools closed and re-surfaced when they resumed. They saw that when teachers in Israel went on strike during the flu season of 1999-2000, visits to doctors and the number of respiratory contagions abridged by over a fifth and more than two fifths respectively [5].

### **2.3 Impacts on Education – Schools**

Going to school is the finest public policy instrument accessible to promote skills. While school period can be entertaining and can promote social skills and social consciousness, from an economic argument, the main importance of being in school is that it surges a child's capacity. Even a fairly short period in school does this; even a equally short time of missed school will have charges for skill growth. But can we guess how much the COVID-19 intermission will disturb learning? Not actually precisely, as we are in a new world; but we

can use other studies to get an order of magnitude.

Two pieces of evidence are useful [7,8] considers a state in which young men in Sweden have divergent number of days to prepare for significant tests. These variances are tentatively random permitting the authors to guess a causal outcome of schooling on skills. The writers establish that even just ten days of extra schooling meaningfully raises scores on tests of the usage of knowledge ('crystallized intelligence') by 1% of a standard deviation. As an enormously rough measure of the effect of the present school closings, if we were to basically generalize those numbers, twelve weeks fewer schooling (i.e. 60 school days) recommends a cost of 6% of a standard deviation, which is non-trivial. They do not get a considerable effect on problem-solving skills (an example of 'fluid intelligence').

An unlike way into this question arises from [9], who approximates that the effect on learning of variances in instructional time across countries. Possibly amazingly, there are very significant variances between countries in hours of teaching. For example, Lavy establishes that the whole weekly hours of instruction in mathematics, language and science is 55% progressive in Denmark than in Austria. These variances matter, triggering significant differences in test score results: one more hour per week over the school year in the core subjects' surges test scores by around 6% of a standard deviation. In our condition, the loss of perhaps 3-4 hours per week teaching in mathematics for 12 weeks could be similar in magnitude to the cost of one hour per week for 30 weeks. Consequently, rather strangely and accidentally, we end up with a projected loss of about 6% of a standard deviation over. Leaving the near resemblance aside, these studies perhaps suggest a probable effect of greater than 10% of a standard deviation, nonetheless certainly above zero.

### **2.4 COVID19 Impacts on Education**

#### **2.4.1 Families**

Families are fundamental to education and agree to offer major efforts into a child's learning, as defined by [10]. The current global-scale growth in home-based teaching might at first thought be seen pretty positively, as likely to be active. But naturally, this part is understood as an accompaniment to the effort from school. Parents

complement a child's mathematics learning by practising counting or stressing simple mathematics difficulties in normal life; or they brighten history lessons with excursions to important museums or monuments. Being the major driver of learning, even in combination with online materials, is a different question; and while several parents around the world do to school their children at home successfully, this seems improbable to generalise over the entire population [11].

Whereas global home schooling will confidently produce some inspirational moments, some fuming moments, some amusing instants and some irritated instants, it seems very improbable that it will on average substitute the learning missing from school. There will probably be considerable disparities among families in the degree to which they can aid their children learn [12]. They further agree that main variances comprise the quantity of time accessible to bestow to teaching, the non-cognitive skills of the resources, parents and also the quantity of knowledge - it's difficult not comprehend yourself. Therefore, this incident will lead to an upsurge in the disparity of human capital growth for the affected partners.

#### **2.4.2 Assessments**

The closing of schools, universities and colleges not only disturb the teaching for students round the world; the closing also coincides with a main assessment period and many examinations have been rearranged.

Assessments internal are possibly thought to be insignificant and many have been purely annulled. But their opinion is to give data about the child's progress for families and teachers. The damage of this data delays the acknowledgement of both high probable and learning complications and can have damaging long-term costs for the child. Andersen and Nielsen [13] look at the resultant of a main IT crash in the testing system in Denmark. Consequently, some children could not sit for the test. The writers find that partaking in the test augmented the score in a reading test two years later by 9% of a standard deviation, with similar effects in mathematics.

Significantly, the lockdown of institutions not only affects internal valuations. In the UK, for example, all examinations for the key public qualifications - GCSEs and A levels - have been

annulled for the whole cohort. Depending on the length of the lockdown, we will probably witness comparable actions around the world. One likely substitute for the annulled valuations is to use 'predicted grades', but [3] demonstrate that these are often not accurate, and that amongst high achieving students, the foreseen marks for those from underprivileged families are lesser than those from more privileged families. They further articulate that another solution is to substitute blind exams with teacher valuations.

Evidence from numerous settings show systematic nonconformities among unblind and blind examinations, where the course of the bias characteristically hinges on whether the child fits into a group that regularly does well [14,15]. For instance, if girls perform well in a subject, an unblind valuation of a boy's performance is likely to be downhill biased. Because such valuations are used as a key necessary requirement to enter higher education, the move to unblind subjective valuations can have possible long-term costs for the parity of opportunity.

It is also likely that some students' careers might profit from the disruptions. For instance, in Norway it has been decreed that all 10th grade schoolchildren will be presented a high-school degree; and [16] show that the 1968 deserting of the normal examination procedures in France (following the student riots) led to self-confident long-term labour market costs for the affected troop.

In higher education several colleges and universities are substituting traditional exams with online assessment tools. This is a new area for both students and teachers, and assessments will probably have greater measurement error than usual. Research demonstrates that proprietors use educational credentials such as grade point averages and degree classifications to sort applicants [17]. The upsurge in the noise of the applicants' signals will therefore possibly reduce the matching proficiency for new graduates on the labour market, who may experience leisurlier earnings progress and higher job separation rates. This is expensive both to the society as a whole, and the individual [18].

#### **2.5 Action**

Understandably, at present African countries, as elsewhere in the world, are prioritising the health sector to minimise contagion and limit deaths.

They are also trying to assist the socially-disadvantaged of their population. Economic recovery and support to other sectors of the economy will have to come later. But it is vital for each sector to start reflecting on the impact of COVID-19 and assessing its possible consequences, otherwise recovery of the sector may be too slow, too late. This applies to the higher education sector as well. The approach must be holistic and involve all stakeholders, including the private sector. Each country should establish a task force on higher education under the leadership of the relevant ministry to survey the situation, suggest immediate and short-term measures and be ready to effect redress when the crisis is over.

## **2.6 Solutions**

The worldwide lockdown of educational establishments is going to ignite major break in students' education; disruptions in internal assessments; and the annulment of public evaluations for credentials or their auxiliary by a substandard substitute.

What can be done to improve these damaging effects? Schools need resources to reconstruct the damage in education, once they open again. How these resources are used, and how to target the children who were particularly hard hit, is a question. Schools should also consider postponing rather than skipping internal assessments, given the signal of the importance of assessments for learning. For new graduates, strategies should back their entry to the labour market to evade longer unemployment periods.

## **2.7 Mitigation Strategies to Stem the Rising Learning Crisis**

### **2.7.1 Distance learning through low-cost technology**

Reaching the vulnerable population in Ghana will require adopting multiple learning delivery modalities ranging from television, radio and SMS-based mobile platforms that are more easily available to the poor. With over 80 percent of the adult population having access to radios and phones, it would be possible to reach most children left behind with targeted instructions via these mediums. However, while online platforms offer personalized learning, other delivery modalities require a central planner, as well coordination between all three tiers of government, and the private sector. This is

where the role of the Ministry of Education will crucially extend beyond traditional policy making and regulations. The commissioners of education could help in the deployment and use of these tools within states, while the federal government coordinates the state efforts by plugging capacity and finance gaps. The government could draw on the experience of Sierra Leone, where the Ebola crisis led to school closures for about 9 months. To reach the most vulnerable and excluded children, the Government of Sierra Leone harnessed radios and televisions to deliver lessons. Whatever strategy the government chooses to incorporate, they must ensure that it is cost-effective (at least available within the home) and easy to use (children and their parents/guardians have some knowledge of it beforehand or can easily learn to use them).

### **2.7.2 Empowering and supporting parents**

Parents/guardians irrespective of their education level will be required to play a pivotal role to ensure learning is unencumbered. In order to ensure proper uptake of the available resources, the government will also need to ensure that parents are equipped to create a conducive learning environment, and support children in this new mode of learning. At this time, parents would be required to act as intermediaries between the school management/government and the children in learning delivery. In some instances, parents would need to take on the role of a teacher in home schooling their children, although relying on guidance from school. Additionally, most of the learning media would be shared amongst household members, and the responsibility will fall on the parents to determine and allocate usage among family members. Therefore, it is essential that the government supports them in understanding and executing their roles during this crucial time.

### **2.7.3 Access to nutritious meals and vital services**

As part of palliatives to cushion the economic effect of the lockdown, the government announced that it intends to sustain the school feeding program to children. While this is reassuring, it is not yet known how this would be implemented. For example, will the government send daily prepared meals to households, or would the cost of the meals be monetized? By extension, there is a need to design a strategy to keep other educational support programmes flowing. The pandemic already underscores the

importance of vaccinations, hence windows to vaccinate children for protection against diseases need to be open. Given that all children are at home, house-to-house vaccination could be deployed. Other services, such as providing sanitary pads for girls, can be distributed via this means. Given that these services are an integral part of learning, scaling them up during these difficult economic times might be crucial. Since the major beneficiary of school feeding programmes are the poor, and given the economic shocks facing the entire household, it might be insufficient to reach only children within the household; the government might need to seek ways to provide meals for entire households.

#### 2.7.4 Reaching the most vulnerable

In keeping the flow of these education support programmes, the educational needs of the hard-to-reach families could also be met. Lessons and homework can go together with physical deliveries of additional education support, while each family develops their homegrown strategy to cover the materials. Angola, Uganda and Zambia have already embedded this approach in their COVID-19 response strategy. The key requirement would be the conscious and active involvement of school administrators in the various government interventions.

#### 2.8 Education Financing

The fiscal space to fund education has further shrunk with the shock on government revenue and economic downturn arising from the COVID-19 pandemic. Many items in the 2020 Education Sector appropriation bill, will not be implemented due to the drastic financial shortfall. Yet, more funding is required to keep learning going or scaled-up education support programmes as part of the government's palliative measures. For the government, reducing costs will require re-prioritising its plans in light of this new reality. The most urgent needs at the moment will be improving teachers' motivation, learners' preparedness and galvanizing domestic digital and media enterprises. This needs to be complemented with innovative sourcing of learning infrastructure during this period. For example, reaching children through existing school and home appliances and gadgets will be more cost-effective. Greater involvement of domestic philanthropists and digital entrepreneurs can reduce the financial burden of sustaining learning through the crisis [19].

### 2.9 Tapping into Global Resources

The World Bank, UNESCO and other development partners have already rolled out a number of education resources that developing countries can readily deploy. The Edtech industry in general is also providing free online platforms to engage directly with students and to assist school administrators and governments to identify technological solutions that support remote learning. On a larger scale, the countries should explore international loans and grants facilities for education as part of mitigation and recovery plans in weathering the COVID-19 crisis (UNESCO).

## 3. RESEARCH METHODOLOGY

### 3.1 Research Design

The researchers used descriptive research survey design in building up this research work. The choice of this research design was considered appropriate because of its advantages of identifying attributes of a group of individuals from a large population. The design was suitable for the study as the study sought the impact of COVID19 on education in Ghana. Data were collected from two main primary and secondary sources.

### 3.2 Population of the Study

Population of a study is a group of persons or aggregate items or things the researcher is interested in getting information about the impact of COVID19 on education in Ghana. The population of the study comprised of all Senior High School students and all Senior High School teachers in the Tamale metropolis. 100 teachers and 100 students of selected Senior High Schools in Tamale metropolis were selected randomly by the researcher as the population of the study.

### 3.3 Sample and Sampling Procedure

Sample is the set of people or items which constitute part of a given population sampling. Due to large size of the target population, the researcher used the Taro Yamani formula to arrive at the sample population of the study.

$$n = \frac{N}{1 + N(e)^2}$$

$$\begin{aligned}
 n &= \frac{200}{1 + 200(0.05)^2} \\
 &= \frac{200}{1 + 200(0.0025)} \\
 &= \frac{200}{1 + 0.5} = 1.5 = \frac{200}{133}.
 \end{aligned}$$

### 3.4 Instrument for Data Collection

The major research instrument used is the questionnaires. The questionnaires were structured and designed to obtain sufficient and relevant information from the respondents. The primary data contained information extracted from the questionnaires in which the respondents were required to give specific answer to a question by ticking in front of an appropriate answer and administered the same on staff of the two organizations.

### 3.5 Method of Data Analysis

The data collected was not an end in itself but it served as a means to an end. The end being the use of the vital data to comprehend the various circumstances it is with a view to making appreciated recommendations and contributions. To this end, the data collected has to be analysed for any meaningful understanding to come out with some results. It is for this reason that the following methods were adopted in the research project for the analysis of the data collected. For a comprehensive analysis of data collected, emphasis was laid on the use of absolute numbers frequencies of responses and

percentages. Answers to the research questions were provided through the assessment of the proportion of workers' response to each statement in the questionnaire linked to any specified question being considered.

Frequency in this study refers to the arrangement of responses in order of magnitude or occurrence while percentage refers to the arrangements of the responses in order of their proportion. The simple percentage method is thought to be straight forward easy to understand the method. The researcher therefore chooses the simple percentage as the method to use.

The formula for percentage is shown as.

$$\% = f/N \times 100/1$$

Where,

f = frequency of respondent's response  
 N = Total Number of responses of the sample  
 100 = Consistency in the percentage of respondents for each item contained in questions.

## 4. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

The data collected from the respondents were analyzed in tabular form with simple percentage for easy understanding. A total of 133(one hundred and thirty-three) questionnaires were distributed and 133 questionnaires were returned.

Question 1: Gender distribution of the respondents.

**Table 1. Gender distribution of the respondents**

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	77	57.9	57.9	57.9
Female	56	42.1	42.1	100.0
Total	133	100.0	100.0	

From the Table 2 it shows that 57.9% of the respondents were male while 42.1% of the respondents were female.

Question 2: The positions held by respondents.

**Table 2. The positions held by respondents**

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Principals	37	27.8	27.8	27.8
Teaching staffs	50	37.6	37.6	65.4
Senior students	23	17.3	17.3	82.7
Junior students	23	17.3	17.3	100.0
Total	133	100.0	100.0	



The tables shown that 37 respondents which represents 27.8% of the respondents are principals 50 respondents which represents 37.6% are teaching staff 23 respondents which represents 17.3% of the respondents are senior students, while 23 respondents which represent 17.3% of the respondents are junior students.

### Test of hypotheses

There is relationship between corona virus disease (COVID-19) and educational activity.

**Table 3. There is relationship between corona virus disease (COVID-19) and educational activity**

Response	Observed N	Expected N	Residual
Agreed	40	33.3	6.8
strongly agreed	50	33.3	16.8
Disagreed	26	33.3	-7.3
strongly disagreed	17	33.3	-16.3
Total	133		

**Table 4. Test Statistics**

There is relationship between corona virus disease (COVID-19) and educational activity	
Chi-Square	19.331 <sup>a</sup>
Df	3
Asymp. Sig.	.000

*a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 33.3*

**Decision rule:** The researcher therefore rejects the null hypothesis, "there is no relationship between corona virus disease (COVID-19) and educational activity" as the calculated value of 19.331 is greater than the critical value of 7.82.

Therefore, the alternate hypothesis is accepted that there is relationship between corona virus disease (COVID-19) and educational activity

### Test of Hypothesis Two

There is impact of COVID19 on education.

**Table 5. There is impact of COVID19 on education**

Response	Observed N	Expected N	Residual
Yes	73	44.3	28.7
No	33	44.3	-11.3
Undecided	27	44.3	-17.3
Total	133		

**Table 6. Test statistics**

There is impact of COVID19 on education	
Chi-Square	28.211 <sup>a</sup>
Df	2
Asymp. Sig.	.000

*a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 44.3*

**Decision rule:** There researcher therefore rejects the null hypothesis there is no impact of COVID19 on education as the calculated value of 28.211 is greater than the critical value of 5.99.

Therefore, the alternate hypothesis is accepted that state there is impact of COVID19 on education.

## **5. SUMMARY, CONCLUSION AND RECOMMENDATION**

### **5.1 Summary**

This study was on the impact of COVID19 on education in Ghana. Four objectives were raised which included: To ascertain the relationship between corona virus disease (COVID-19) and educational activity, to ascertain the preventive strategies of COVID19 in educational sector, to ascertain the impact of COVID19 on education and to determine the effect of corona virus disease (COVID-19) on the student well-being. In line with these objectives, two research hypotheses were formulated and two null hypotheses were posited. The total population for the study is 100 teachers and 100 students of selected senior high schools in Tamale. The instrument used for the data collection by the researcher is questionnaires. Descriptive Survey research design was adopted for this study. A total of 133 respondents made up of headteachers, teachers, senior students and junior students were used for the study. The data collected were presented in tables and analyzed using simple percentages and frequencies.

### **5.2 Conclusion**

The focus of current activities is on providing information and preventing the spread of the epidemic. These are important and should not be neglected. Equal importance must be placed on the more difficult tasks associated with planning for the impacts which will impede the Ministry's ability to deliver education. In addition, now that the impacts on the education system itself are better understood, the programme of activities must include planning for the impacts on the demand for education and the ability of the Ministry to supply education.

### **5.3 Recommendation**

It is important ministry of education should observe social distancing. When there is minimal to moderate community transmission, social distancing strategies can be implemented such as cancelling field trips, assemblies, and other large gatherings such as physical education or

choir classes or meals in a cafeteria, increasing the space between desks, staggering arrival and dismissal times, limiting nonessential visitors, and using a separate health office location for children with flu-like symptoms. When there is substantial transmission in the local community, in addition to social distancing strategies, extended school dismissals may be considered.

## **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

## **REFERENCES**

1. Nasir M. Impact of the 2019-20 coronavirus pandemic on education. *International Journal of Health Preferences Research*; 2020.
2. Reynolds M. What is coronavirus and how close is it to becoming a pandemic? *Wired UK*. [ISSN 1357-0978] [Archived from the original on 5 March 2020] [Retrieved 5 March 2020]
3. Murphy R, Wyness G. Minority report: The impact of predicted grades on university admissions of disadvantaged groups. *CEPEO Working Paper Series No 20-07*; 2020.
4. World Health Organisation; 2020. Available:[https://www.who.int/health-topics/coronavirus#tab=tab\\_1](https://www.who.int/health-topics/coronavirus#tab=tab_1) [Retrieved, May 6, 2020]
5. COVID-19 Educational Disruption and Response, UNESCO. 2020-03-04. [Retrieved 2020-04 -12]
6. Howard M, Harvey B, Alexander JN, et al. *Nonpharmaceutical Interventions Implemented by US during the 1918-1919 Influenza*; 2007.
7. Lindzon J. School closures are starting, and they'll have far-reaching economic impacts. *Fast Company*; 2020. [Retrieved 2020-03-22]
8. Carlsson M, Dahl GB, Öckert B, Rooth D. The effect of schooling on cognitive skills. *Review of Economics and Statistics*. 2015; 97(3):533–547.
9. Lavy V. Do differences in schools' instruction time explain international achievement gaps? Evidence from Developed and Developing Countries. *Economic Journal*. 2015;125.

10. Salvanes K. Education and family background: Mechanisms and policies. In Hanushek E, Machin S, Woessmann L. (eds), Handbook of the Economics of Education. 2011;3.
11. Walsh E. ed. Closing schools won't stop pandemics: Study. Reuters; 2009. [Retrieved 17 March 2020]
12. Oreopoulos P, Page M, Stevens A. Does human capital transfer from parent to child? The intergenerational effects of compulsory schooling. Journal of Labor Economics. 2006;24(4):729–760.
13. Andersen SC, Nielsen HS. Learning from performance information. Journal of Public Administration Research and Theory; 2019.
14. Burgess S, Greaves E. Test scores, subjective assessment, and stereotyping of ethnic minorities. Journal of Labor Economics. 2013;31(3):535–576.
15. Rangvid BS Systematic differences across evaluation schemes and educational choice. Economics of Education Review. 2015;48:41-55.
16. Maurin E, McNally S. Vive la revolution! Long-term educational returns of 1968 to the angry students. Journal of Labor Economics. 2008;26(1):1-33.
17. Piopiunik M, Schwerdt G, Simon L, Woessman L. Skills, signals, and employability: An experimental investigation. European Economic Review. 2020; 123:103374.
18. Fredriksson P, Hensvik L, Nordström Skans O. Mismatch of talent: Evidence on match quality, entry wages and job mobility. American Economic Review. 2018;108(11):3303-38.
19. Bloom DE, Cadarette D, Sevilla JP. The economic risks and impacts of epidemics. International Monetary Fund, F&D Magazine; 2018.

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