



Economic Impact of COVID-19 on Seventh-day Adventist College of Education Students in Ghana: Did the Lockdown Status of a District Matter?

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Abstract: This article examined the economic effects of the coronavirus disease on college of education students based on their location in the lockdown and non-lockdown districts. A total of 198 students from the Seventh-day Adventist College of Education, Agona-Ashanti, Ghana, were selected using a simple random sampling. A questionnaire and semi-structured thematic guide were used for data collection. Quantitative data analysis was performed using IBM SPSS (version 25) while direct quotes from in-depth interviews were used to support quantitative data. The results show that students and parents mainly engaged in trading and farming as their main sources of income. The chi-square test of independence showed no statistically significant differences in the self-supporting livelihood activities pursued by students from lockdown and non-lockdown districts ($P > .05$). It also showed no statistically significant differences in the effect of the pandemic on both parents' and students' livelihood activities based on their location ($P > .05$). The economic consequences of the pandemic on students' academic activities in both lockdown and non-lockdown districts were, thus, similar. It is recommended that the Ghanaian government's measures to mitigate the economic effects of the pandemic should not be limited to the lockdown districts but should be extended to all districts across the country.

Keywords: COVID-19; economic effects; lockdown districts; non-lockdown districts; Ghana.

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Introduction

The novel coronavirus disease (COVID-19) spread rapidly all over the world (Cao, et al., 2020; Kumar & Choudhury, 2021). Governments implemented large-scale interventions, such as lockdowns and school closures to control the spread of the disease. These strategies, which were carried out with varying stringency, imposed significant economic losses on communities, especially localized lockdown measures that had large effects on local economic activities (Asahi, Undurraga, Valdés & Wagner, 2021). Due to the pandemic's economic hardships, parents and guardians found it difficult to pay school-related expenses such as school kits and learning supplies (Duraku & Hoxha, 2021; Munir, 2021; Tuffour, Cobbinah, Brefo & Otibua, 2021). In Japan, the number of working students decreased during the pandemic. Almost half of working students lost their jobs due to the impact of the pandemic, which affected their lives and studies. Students were concerned about living expenses and tuition fees as a result of this predicament (Tsurugano, Nishikitani, Inoue & Yano, 2021).

It is estimated that an additional 9.1 percent of Sub-Saharan Africa's population fell into extreme poverty, with lockdowns accounting for nearly 65 percent of this increase (Teachout & Zipfel, 2020). Ghana's unique strategy to curb the spread of the disease was concerned mainly with measures such as the disinfection of and running of a shift system in market facilities and lockdown of the epicentres of the disease. Passenger travel between the lockdown areas and other parts of the country was restricted. Only market traders involved in the production, distribution and marketing of food and beverages were excluded from the partial lockdown in Greater Accra and Kumasi. All other traders were asked to stay home, which negatively impacted trading activities (Asante & Mills, 2020). Forty-two thousand (42,000) people in the country lost their jobs in the first two months of the outbreak (Aduhene & Osei-Assibey, 2021).

This paper makes contributions to the literature on the effects of the COVID-19 pandemic on students in several ways. First, it analysed the variations in the monthly pocket income of students based on location and whether or not they pursued self-supporting livelihood activities. According to studies, there is a disparity in well-being between urban and rural counterparts, as well as different socio-economic opportunities for

urban and rural residents (Nugroho, Hanani, Toiba & Sujarwo, 2022; Shedenova & Beimisheva, 2013). For example, Nugroho et al. (2022) indicated that urban dwellers have a higher income than their rural counterparts. Since the districts that were placed on partial lockdown were urban districts, it implies that the lockdown residents might have had better incomes compared to their counterparts that were not on lockdown. The study, thus, examined whether the monthly pocket incomes of students in the lockdown districts differed from the incomes of students from the non-lockdown areas.

Second, it analysed the variations in the self-supporting livelihood activities of students based on their location. We also examined the extent of the variations in the occupations of the students' parents, including guardians, in the lockdown areas and non-lockdown areas. Studies indicated that urban areas are noted for the proliferation of home-based enterprises (Owusu, 2007). Mbisso (2011) indicated that petty trading is a key economic activity that serves many low-income earners in the urban areas of developing countries. Since the districts under lockdown in Ghana were urbanized, it implies that the residents in these areas engaged mainly in trading and related activities. The study, therefore, examined the extent to which the occupations of parents in the lockdown districts varied from those that were not on lockdown.

Third, it assessed the variations in the effect of the pandemic on the livelihood activities of parents and students in lockdown and non-lockdown areas. In their study in Chile, Asahi, Undurraga, Valdés and Wagner (2021) reported that lockdowns in municipalities were associated with a 10%–15% drop in local economic activity, which was twice the reduction in local economic activity suffered by municipalities that were not under lockdown. This survey examined whether or not the economic effects of the pandemic on college students differed based on the lockdown status of their districts.

The study was guided by the following objectives:

1. To establish the spatial Location of Students in relations to the Lockdown and non-lockdown districts.
2. To establish the differences in the monthly pocket income of students based on their locations.

3. To determine the differences in the self-supporting livelihood activities of students based on the status of their districts.
4. To establish the variations in the effects of COVID-19 on students' self-supporting activities based on the status of their districts.
5. To establish the differences in the occupations of parents based on the status of their districts.
6. To establish the differences in the effects of the COVID-19 pandemic on the occupations of parents based on the status of the districts.

Theoretical Underpinnings

Everything is related to everything else, but near things are more related than distant things, according to the first law of geography, commonly known as Tobler's First Law [TFL] (Tobler, 1970; Waters, 2017). The distance decay effect, which describes the effect of distance on interactions between two sites, is related to TFL. It describes how impact diminishes as distance increases (Pun-Cheng, 2017). The distance decay effect in a space-time interaction can be understood as; the stronger the interaction between two objects, the closer their distance is. It is divided into two levels: macroscopic and microscopic. At the macro-level, the interaction between two geographical entities is negatively correlated with distance under the assumption that other factors are relatively stable, whereas at the micro level, the probability that a single object (e.g., an animal or a person) moves to a destination is inversely related to distance, and the strength of the interaction between two moving objects is also inversely related to distance (Yin et al., 2019). Asahi et al. (2021) indicated that the economic effects of the COVID-19 pandemic on lockdown areas were twice the effects that occurred in non-lockdown areas. According to Asante and Mills (2020), urban areas which went on lockdown were the foci of the new coronavirus. Based on Tobler's First Law and the distance decay effect, people in lockdown districts will incur substantial economic effects when compared to those in non-lockdown districts because of their proximity to the movement restriction measures taken by governments. The proposition, therefore, is that the COVID-19 pandemic had a greater negative economic effect on students who lived in lockdown districts than on those who did not.

Methodology

Design

The study adopted the mixed-method approach to research, involving the collection of both qualitative and quantitative data. Specifically, the study adopted the concurrent triangulation design using a convergence model in which quantitative and qualitative data are collected within the same period and quantitative results are corroborated with qualitative findings (Creswell, 2014). The choice of the design was informed by the limited potential for only a structured survey to contribute to a complete understanding of the problem. Partly qualitative research, using interviews, was an appropriate option to provide information that augments those gathered from the questionnaire. According to Creswell (2010), using both quantitative and qualitative data in a study gives a better understanding of a research problem than the use of only one of them. However, based on the number of times data was collected, the study adopted a cross-sectional study design. In using this design, data is collected from a cross-section of a study population at once (Kumar, 2011; Honlah, Segbefia, Appiah & Mensah, 2019). It is most appropriate for finding out the prevalence of a problem by taking a cross-section of the population. The design provides an overall 'picture' of a problem as it stands at the time of a study (Kumar, 2011).

Population and Sampling

The study was carried out on level 100 and 200 students of the Seventh-day Adventist College of Education in the Ashanti Region. The college is located in the Sekyere South District Assembly. The selection was based on convenience since it was easier for the records of students to be obtained in the college (Edgar & Manz, 2017). Level 300 students were excluded from the study since they were the last batch of students under the Diploma in Basic Education program, and had graduated from college at the time of the COVID-19 outbreak. The simple random sampling procedure was adopted in the selection of respondents using the fishbowl draw (Kumar, 2011). Using this procedure, lists of students in levels 100 and 200 during the 2019/2020 academic year were obtained from the college administration. The population of students on the two lists was 406. The sample size was estimated using Dillman (2000); $n = [(N)(p)(1-p)] / [(N-1)(B/C)^2 + (p)(1-p)]$, where n is the sample size

needed for the desired level of precision, N is the population of students, p is the proportion of the population with the desired characteristics; preferably 50% or .5, B is the accepted sampling error, or precision (.5 or 5%), and C is Z statistic associated with the confidence level, which is 1.96 that corresponds to 95% confidence level. Applicably, $N = 406$, $p = 0.5$, $B = 0.05$ (5%), $C = 1.96$. Thus, $n = [(406) (0.5) (1-0.5)] / [(406-1)$

$(0.05/1.96)^2 + (0.5) (1-0.5)]$. Therefore a sample of 198 was used for the study. To ensure proportional representation in the selection of samples from each level, the proportionate sampling procedure was adopted, expressed as $SL = TS \times NS/P$, where SL is sample size per level, TS is the total sample size, NS is the number of students per level and P is the population of students at the two levels as reflected in Table 1.

Table 1: Levels of Students and the Respective Samples

Levels	Population	Sample
Level 100	210	$198 \times 210 / 406 = 102$
Level 200	196	$198 \times 196 / 406 = 96$
Total	406	198

Table 2: Background Characteristics of Respondents

Variables	Frequency	Percentage (%)
Sex		
Male	124	62.6
Female	74	37.4
Regions of students		
Greater Accra	3	1.5
Northern	2	1.0
Ashanti	162	81.8
Eastern	1	0.5
Central	4	2.0
Bono East	18	9.1
Ahafo	4	2.0
Bono	1	0.5
Western North	3	1.5
Status of district		
Under partial lockdown	66	33.3
Not under partial lockdown	132	66.7
Persons stayed with		
Alone	23	11.6
Parents	133	67.2
Guardian	35	17.7
Friends	4	2.0
Other	3	(1.5)

Instrumentation

The study instrument comprised a structured questionnaire that inquired about demographic information, including gender, region, district and the sources of parents' or guardians' income. The questionnaire comprised both open and closed items. The aim was to allow students to provide detailed information where the closed items might have limitations (Honlah et al., 2019). In addition, qualitative data was gathered from 10

students through unstructured interviews using a semi-structured thematic guide. According to Kumar (2011), using interviews allows researchers to elicit in-depth information by probing.

Statistical Treatment of Data

The variations in the monthly pocket income of students based on the lockdown status of the districts were analyzed using a Mann-Whitney U test. The extent to which students pursued self-

supporting livelihood activities and the differences in the activities based on the lockdown status of the districts were analyzed using chi square test of independence. A chi-square test of independence was also used to determine the extent of the differences in the effect of COVID-19 on the occupations of parents and the extended effect on the academic activities of students based on the status of the districts. It was also used to determine the extent of the differences in the occupations of parents based on the status of the districts. A chi-square test of independence was also performed to determine whether or not there were differences in the occupations of the parents of students who reported that COVID-19 affected their parents' occupations and those who reported otherwise. To back up the quantitative data, direct quotes from respondents were employed.

Location and status of districts

We collected data on the community/town, district and regions where students lived to determine whether or not they were in lockdown districts. The three variables were gathered for verification to confirm that the students' locations were accurate. The names of the districts indicated by students were compared with the government's list of districts that were placed under lockdown (Arhinful, 2020). As a result, all districts were divided into two groups based on their lockdown status. In SPSS (version 25), the frequency of students in each district was estimated and used to show the students' locations. As a result, the map shows the number of students in each district.

Ethical Considerations

The researchers obtained written permission from the college authorities. The study was also approved by the Committee on Human Research, Publications and Ethics at the Kwame Nkrumah University of Science and Technology, School of Medical Sciences, Kumasi, Ghana (Ref.: CHRE/AP/297/21). Besides, study participants were fully briefed on the research after which their verbal consent was obtained.

Results and Discussions

Demographic Characteristics of Respondents

The majority of the respondents were males, lived in the Ashanti and the Bono East Regions, lived in

districts that were not under partial lockdown and were with their parents and guardians during the COVID-19 pandemic. The results confirm the report of earlier studies (Cao et al., 2020; Dhar, Ayithey & Sarkar, 2020) that most college students lived with their parents during the pandemic.

Objective 1: To establish the spatial Location of Students in relations to the Lockdown and Non-lockdown Districts.

Six districts came under partial lockdown during the COVID-19 pandemic. Four of the districts were in the Ashanti Region – Atwima Nwabiagya North (AL), Kwabre East (AN), Bosomtwe (AT) and Atwima Kwanwoma (M). Two were in the Greater Accra Region – Ga South Municipal (AR) and La Nkwantanang Madina Municipality (AS). The Seventh-day Adventist College of Education, Agona-Ashanti, was located in the Sekyere South District (O), which was not under partial lockdown. The majority of the students were located outside the districts that went on lockdown. Figure 1 shows that the frequency of students decreased with increasing distance from the college and the lockdown districts in the Ashanti Region. This indicated a stronger interaction between the college and the surrounding districts. Thus, the districts in the Greater Accra Region that came under lockdown had fewer students because of the distance.

In agreement with the distance decay effect and TFL, the college has a stronger influence on the surrounding districts (Pun-Cheng, 2017; Tobler, 1970; Waters, 2017).

Objective 2: To establish the differences in the Monthly Pocket Income of Students Based on their Locations.

An appreciable proportion of the students received a monthly pocket income of up to Gh₵100, with the majority living in districts that were not on lockdown. Table 3 shows that the majority of the students received Gh₵101 to Gh₵300 as monthly pocket income. Most of these students lived in districts that were not on lockdown. The majority of students who received Gh₵301 to Gh₵500 lived in districts that were under lockdown. Only 1% of the students received at least Gh₵501 per month.

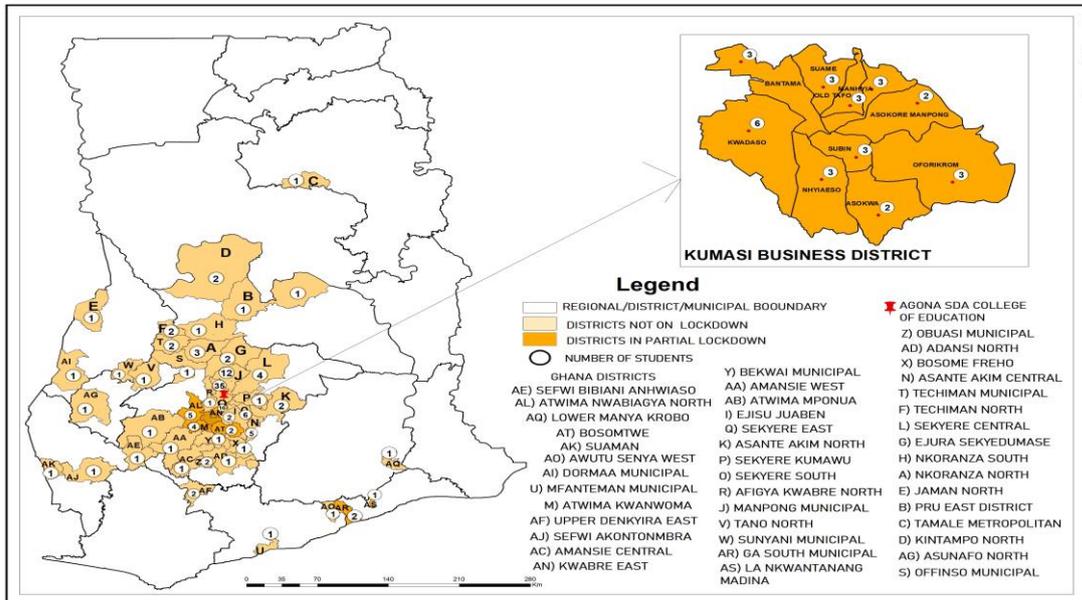


Figure 1: Locations of college students in the lockdown and non-lockdown areas

The incomes of students, however, did not significantly vary based on the status of the districts ($P > 0.5$). Even though earlier studies had indicated that urban residents received higher incomes than their rural and peri-urban counterparts (Nugroho, Hanani, Toiba & Sujarwo, 2022; Shedenova & Beimisheva, 2013), the study found that college students from the lockdown

districts did not receive better monthly pocket incomes than their counterparts in the non-lockdown areas, even though students in the former category of districts were found in urban areas. The current study suggests that the monthly pocket income of students from lockdown and non-lockdown districts did not vary.

Table 3: Monthly pocket Income and Status of District

Income groups	Total Number of students		Lockdown districts		Non-lockdown districts		Statistics	P
	F	%	(f)	% within income group	(f)	% within income group		
≤100	82	41.1	28	34.1	54	65.9	-.330	.742
101-300	104	52.5	31	29.8	73	70.2		
301-500	10	5.1	6	60.0	4	40.0		
≥501	2	1.0	1	50.0	1	50.0		

Objective 3: To determine the differences in the Self-supporting livelihood activities of students based on the status of their districts.

Almost half of the students pursued various livelihood activities to support themselves, as presented in Table 4. Most of these students lived in districts that did not come under partial lockdown. Besides, the majority of students who did not pursue self-supporting livelihood activities resided in districts that did not go on lockdown. However, whether or not students engaged in self-supporting activities during vacations did not

differ significantly by district status ($P > .05$, $\chi^2 = 3.648$, $df = 1$, Cramer's $V = 0.136$).

The major livelihood activities pursued by students were trading and farming. Both were pursued by students who lived outside the districts that went on lockdown, particularly farming. Driving and construction activities such as masonry and steel bending were also mostly pursued by students who lived outside the lockdown districts. Teaching and handicrafts were pursued by similar proportions of students.

Table 4: Self-supporting livelihood activities pursued during vacations

Pursue livelihood activities	Total number of students (N=198)		Lockdown district		Non-lockdown districts		Statistics (χ^2)	P
	(f)	% within total	(f)	% within group	(f)	% within group		
Yes	97	49	26	26.8	71	73.2	3.648	.056
No	101	51	40	39.6	61	60.4		
Livelihood activities	Total Number of students (N=97)		Lockdown district		Non-lockdown districts		Statistics (χ^2)	P
	(f)	% within total	(f)	% within group	(f)	% within group		
Farming	12	6.1	1	8.3	11	91.7	9.111	.245
Trading	48	24.2	14	29.2	34	70.8		
Driving/Transport	7	3.5	1	14.3	6	85.7		
Teaching	6	3.0	3	50.0	3	50.0		
Handicraft	4	2.0	2	50.0	2	50.0		
Construction	7	3.5	1	14.3	6	85.7		
Others	13	6.6	4	30.8	9	69.2		

The other livelihood activities included mining, barbering saloon operation and sawmill operations.

The results, however, show that the economic activities of students did not significantly vary based on the status of their districts ($P > 0.5$, $\chi^2 = 9.111$, $df = 7$, Cramer's $V = 0.215$). Thus, although Owusu (2007) and Mbisso (2011) indicated that people in urban areas mainly engage in petty trading and related activities, the results of the current study show that the self-supporting economic activities of college students in the lockdown areas and the places away from the lockdown districts did not vary. The current study suggests that students who lived in and around the central business districts of the Ashanti and Greater Accra Regions and those who lived farther away pursued similar self-supporting livelihood activities. The study also suggests that students mainly engage in trading and farming to support themselves. The results of the Cramer's V test of the strength of the association revealed a weak link between the variables. This indicated that whether or not students pursued self-supporting livelihood activities partially depended on the status of their districts. Besides, the livelihood activities adopted by students partially depended on their location in the lockdown and non-lockdown districts. If any given student was randomly selected out of the sample, there would be the likelihood that the person would adopt any of the strategies irrespective of their location.

Objective 4: To establish the variations in the Effects of COVID-19 on students' self-supporting activities based on the status of their Districts.

The majority of the students who pursued self-supporting livelihood activities indicated that the pandemic affected their activities, as shown in Table 5. This was irrespective of the status of the districts ($P > .05$, $\chi^2 = 3.707$, $df = 2$, Cramer's $V = 0.137$). The majority of the students also reported that the pandemic had a negative bearing on their academic activities. The negative effects included the inability of students to pay their academic facility-user fees, buy learning materials and purchase data for the online studies. One student explained in the following words during an in-depth interview:

During the periods of COVID-19, buyers that came for my farm produce were not able to do so because of travel restrictions. Due to that, some foodstuffs like watermelon and tomatoes which could not stay for long without proper preservation were spoiled. Meanwhile, the price of weedicides and fertilizers increased and became expensive for purchasing. This situation affected my income" (A level 200 male student from Techiman Municipality; July 2021).

It was further noted by one of respondents that "I have a sim card selling business. During the Covid-19 pandemic, people did not frequently visit the market to purchase the cards due to fear and

panic, so my sim card business collapsed” (A level 100 female student from Upper Denkyira East Municipality; July 2021). The results showed that there was no statistically significant difference in the effects of the pandemic on the academic activities of students based on the status of their

districts ($P > .05$, $\chi^2 = 5.009$, $df = 2$, Cramer’s $V = 0.159$). This contradicts the findings of Asahi et al. (2021) in their study in Chile that the economic impact of the pandemic on lockdown areas was twice that of non-lockdown areas.

Table 5: COVID-19 pandemic and self-supporting activities of students

Status of district	Total number of students (N=97)		COVID-19 affected self-supporting activity				Statistics (χ^2)	P
	(f)	% of total	Yes		No			
			(f)	% within group	(f)	% within group		
Lockdown districts	26	26.8	25	96.2	1	3.9	3.707	.157
Non-lockdown districts	71	73.2	69	97.2	2	2.8		

Status of district	Number of students (N=94)		Effect had a bearing on academic activities				Statistics (χ^2)	P
	(f)	% of total	Yes		No			
			(f)	% within group	(f)	% within group		
Lockdown districts	25	26.6	21	84	5	20	5.009	.082
Non-lockdown districts	69	73.4	62	89.9	7	10.1		

The current study suggests that the COVID-19 pandemic had similar economic effects on students who lived in districts that went on lockdown and those that did not. The results of the Cramer’s V test of the strength of the association revealed a weak link between the variables. This indicated that whether or not the COVID-pandemic affected students’ self-supporting livelihood activities partially depended on the status of their districts. Besides, the effect of the economic impact on students’ academic activities partially depended on their location in the lockdown and non-lockdown districts. If any given student was randomly selected out of the sample, there would be the likelihood that the person would experience the impact of the pandemic on their academic activities irrespective of their location.

Objective 5: To establish the differences in the occupations of parents based on the status of their districts.

An appreciable proportion of the parents were involved in trading activities, as shown in Table 6. Their majority (51.2%) were from districts that were placed on lockdown.

Farming was the parents' second most adopted lively activity. However, this was mostly done in districts that weren't on lockdown (85.7%). The results show that 9.6% of parents undertook farming and trading as a source of income. Students whose parents combined trading and teaching, trading and driving and farming and teaching made up a smaller percentage of the total. Furthermore, the majority of students whose parents worked in the healthcare industry lived outside of the lockdown districts. The results suggest that there were significant differences in

the occupations of parents based on the status of the districts ($P < .05$, $\chi^2 = 26.288$, $df = 8$, Cramer's $V = 0.364$). Thus, the occupations of parents in

lockdown districts and non-lockdown districts were not similar.

Table 7: Effects of COVID-19 on parents' occupation based on the status of the districts

Variables	Total (N=198)		COVID-19 affected parents' occupation				Statistics (χ^2)	P
	(f)	% of total	Yes		No			
Status of district	(f)	% of total	(f)	% within group	(f)	% within group		
Lockdown districts	66	33.3	51	77.3	15	22.7	1.258	.262
Non-lockdown districts	132	66.7	92	69.6	40	30.3		

Status of district	Total (N=143)		Effect had a bearing on academic activities				Statistics (χ^2)	P
	(f)	% of total	Yes		No			
Status of district	(f)	% of total	(f)	% within group	(f)	% within group		
Lockdown districts	51	35.7	37	72.5	14	27.5	.514	.473
Non-lockdown districts	92	64.3	81	88	11	12		

Objective 6: To establish the differences in the effects of the COVID-19 pandemic on the occupations of parents based on the status of the districts.

The majority of the students indicated that the COVID-19 pandemic negatively affected their parents' livelihood activities. These students mainly resided outside the lockdown districts. From Table 7, the majority of students who reported that the pandemic did not harm the occupations of their parents lived outside the lockdown districts. The results further show that there were no statistically significant differences in the effects of the pandemic on the occupations of parents in relation to the status of the districts ($P > .05$, $\chi^2 = 1.259$, $df = 1$, Cramer's $V = 0.080$). The results contradict the findings of Asahi et al. (2021) that residents of Chile who were on lockdown suffered many economic consequences, compared to their counterparts who were not on lockdown. The results, however, confirm the report of the Ghana Statistical Service (2020) that the pandemic affected not only the economic activities in the lockdown areas, but those in non-lockdown areas also faced challenges concerning customers patronizing their goods. This study suggests that the pandemic had similar effects on

the economic activities of parents irrespective of their location.

Table 7 shows that, the majority of the students whose parents' occupations were negatively affected indicated that the effect had a bearing on their academic activities. These students mainly resided outside the lockdown districts. The negative effects of the pandemic made it difficult for parents to finance education by paying their academic facility user fees and purchasing logistics such as learning materials and equipment for online teaching and learning. One of students had this to report during the in-depth interview:

During the COVID - 19, there was a lockdown in my area. People were not allowed to go out unless they had a tangible reason to do so. Shops in our area were closed except for those that sold food items. My mother closed her hairdressing salon. This situation negatively affected us financially since my mother had no other source of income. When schools were reopened, it affected my studies because my mother could not get me adequate money for my books and my upkeep (A level 200 female student from Kwadaso Municipality; July 2021).

The effect was further indicated by one student through the in-depth interview that:

Coronavirus harmed my parents' work. My parents are farmers producing watermelon, tomatoes and maize. That's the only activity they do to take care of my education. During the pandemic, customers did not buy their foodstuffs as usual because of movement restrictions. This harmed my education since I found it difficult to pay my school fees and buy some books. From the early part of 2020, my parents have lost a lot of income due to COVID-19" (A level 200 male student from Techiman Municipality; July 2021).

The in-depth interview further revealed that:

For almost the six months in 2020, my parents faced financial crisis due to movement restrictions imposed by the government. My mother was not able to do her petty trading work to generate income. She spent all her savings on feeding and payment of bills. This brought financial challenges to the family" (A level 100 male student from Asante Akim Central Municipality District; July 2021).

It was further revealed by one student regarding the effect of lockdown that:

My parents are traders. They could not do effective business during the lockdown. They lost their income and their capital since they received no external incentive. Because of this, it has become difficult for them to raise capital to start a new business. This has caused a financial crisis in the home" (A level 100 female student from Kwabre East Municipality; July 2021).

Finally, one more student described the lockdown effect in the following words:

My father is a mason. During the COVID-19 pandemic, he was not getting much work to do as usual. Sometimes when he got a job to do, the employees would not pay him. They would complain about financial challenges due to COVID-19. My mother too is a businesswoman, dealing with the sales of provisions. During the pandemic, most people in my town purchased all the items they needed in bulk, thinking that there would be a lockdown. After that, when my

mother opened the store, she didn't get customers to buy the items. So she stopped opening the store for some time. This made it difficult for us to get money to cater for ourselves" (A level 100 female student from Upper Denkyira East Municipality; July 2021).

Among students who reported that the effects of the pandemic on parents' occupations did not have a bearing on their education, the majority of them lived in the lockdown Districts. Despite the restrictions imposed on people's movement and economic activities, these students indicated that their parents could fully finance their education. The findings, however, show that there were no statistically significant differences in the effects of the pandemic on students' academic activities based on district status ($P > .05$, $\chi^2 = 0.514$, $df = 1$, Cramer's $V = 0.051$). The findings confirm earlier studies that the COVID-19 pandemic created economic hardships among parents and guardians, making it difficult for them to finance school-related expenses (Duraku & Hoxha, 2021; Munir, 2021; Tuffour, Cobbinah, Brefo & Otibua, 2021). The results also agree with earlier reports that the closure of large marketplaces around the country to disinfect, decongest and enforce social distancing as a COVID-19 prevention protocol led to the effect of the COVID-19 affecting not only those in lockdown districts but those who were not directly on lockdown (Aduhene & Osei-Assibey, 2021; Asante & Mills, 2020).

The results also confirm the findings of the Ghana Statistical Service (2020) that the pandemic affected businesses in both lockdown and non-lockdown areas. The Cramer's V test of the strength of the association showed a weak link between the variables. This indicated that whether or not the COVID-pandemic affected parents' occupations partially depended on the status of the districts. Besides, the economic impact on students' academic activities partially depended on their location. If any given student was randomly selected out of the sample, there would be the likelihood that the person would experience the impact of the pandemic on their academic activities irrespective of their location.

Parents' Occupations Affected by the COVID-19

Table 8 shows that the majority of students whose parents engaged in the various occupational groupings, except health-service

delivery, indicated that, the pandemic affected those occupations.

Table 8: Parents' occupations affected by the COVID-19 pandemic

Occupations	Total		COVID-19 affected parents' occupation				Statistics (χ^2)	P
	F	% of total	Yes		No			
			f	% within occupation	f	% within occupation		
Farming	63(31.8)	31.8	42	66.7	21	33.3	10.462	.234
Trading	80(40.4)	40.4	63	78.8	17	21.3		
Teaching	8(4.0)	4.0	6	75.0	2	25.0		
Farming and trading	19(9.6)	9.6	13	68.4	6	31.6		
Trading and driving	3(1.5)	1.5	3	100	-	-		
Trading and teaching	8(4.0)	4.0	5	62.5	3	37.5		
Farming and teaching	3(1.5)	1.5	1	33.3	2	66.7		
Health service provision	5(2.5)	2.5	2	40.0	3	60.0		
Other	9(4.5)	4.5	8	88.9	1	11.1		

The results, however, show that there were no significant variations in the occupations that were affected by the pandemic as compared to those that were not affected ($P > 0.5$, $\chi^2 = 10.462$, $df = 8$, Cramer's $V = 0.230$). The Ghana Statistical Service (2020) indicated that various economic activities were affected by the pandemic, especially in the areas of education, transport and food services.

Conclusions and Recommendations

The majority of the students lived in districts that did not go on lockdown. Students from lockdown districts had similar pocket income as those from non-lockdown districts. Regardless of the state of their districts, students and parents pursued similar livelihood activities. Trading and farming were the two main sources of income for both parents and students. Irrespective of the status of the districts, the COVID-19 pandemic had a similar impact on the livelihood activities of both parents and college students. Furthermore, the economic consequences of the pandemic on students'

academic activities in both lockdown and non-lockdown districts were similar. Despite the proposition that lockdown districts experienced severe economic consequences relative to other districts, the economic consequences were identical in all districts.

It is recommended that the government's measures to mitigate the economic effects of the pandemic should not be limited to the lockdown districts but should be extended to all districts across the country. Measures taken by colleges and the central government should be directed at all students, regardless of where they are located.

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