



East African Journal of Interdisciplinary Studies

eajis.eanso.org

Volume 8, Issue 1, 2025

Print ISSN: 2707-529X | Online ISSN: 2707-5303

Title DOI: <https://doi.org/10.37284/2707-5303>

ENSO

EAST AFRICAN
NATURE &
SCIENCE
ORGANIZATION

Original Article

Assessing the Influence of COVID-19 on the Financial Performance of Schools in Ghana: Evidence from Private Schools in Ghana

Faisal Musah^{1*}, Felix Lartey², Abigail Owusu Boakye², Collins Awatey² & John Paul Azumah²

¹ Regional Maritime University, Accra.

² School of Business, University of Cape Coast.

*Author's ORCID ID: <https://orcid.org/0009-0002-2673-0514>; Email: faisal.musah@rmu.edu.gh

Article DOI: <https://doi.org/10.37284/eajis.8.1.2620>

Date Published: **ABSTRACT**

18 January 2025

Keywords:

COVID-19,
Financial
Performance,
Private Schools.

This study investigated the impact of the COVID-19 pandemic on the financial performance of private schools in the New Juaben Municipality of Ghana. The study collected primary data from 73 private school establishments within the New Juaben municipality. The study population comprised 588 staff within the municipality. A total of 238 participants were selected using the simple random sampling method and structured questionnaires were administered to the chosen respondents. The study employed a quantitative approach and adopted the explanatory research design. The data gathered were analysed using Smart PLS-SEM 4. The findings indicated that the relationship between COVID-19 and student enrollment is statistically insignificant. However, it is worth noting that the relationship between COVID-19 and Revenue Mobilization and COVID-19 and Operational Costs are statistically significant. The study concluded that private schools faced severe financial challenges during the pandemic, likely due to delayed fee payments, economic difficulties faced by parents, and disruptions in financial flows, and recommends that school owners re-evaluate and strengthen their financial management strategies. This might involve diversifying income streams beyond traditional tuition fees.

APA CITATION

Musah, F., Lartey, F., Boakye, A. O., Awatey, C. & Azumah, J. P. (2025). Assessing the Influence of COVID-19 on the Financial Performance of Schools in Ghana: Evidence from Private Schools in Ghana. *East African Journal of Interdisciplinary Studies*, 8(1), 13-35. <https://doi.org/10.37284/eajis.8.1.2620>.

CHICAGO CITATION

Musah, Faisal, Felix Lartey, Abigail Owusu Boakye, Collins Awatey and John Paul Azumah. 2025. "Assessing the Influence of COVID-19 on the Financial Performance of Schools in Ghana: Evidence from Private Schools in Ghana". *East African Journal of Interdisciplinary Studies* 8 (1), 13-35. <https://doi.org/10.37284/eajis.8.1.2620>.

HARVARD CITATION

Musah, F., Lartey, F., Boakye, A. O., Awatey, C. & Azumah, J. P. (2025) "Assessing the Influence of COVID-19 on the Financial Performance of Schools in Ghana: Evidence from Private Schools in Ghana", *East African Journal of Interdisciplinary Studies*, 8(1), pp. 13-35. doi: 10.37284/eajis.8.1.2620.

IEEE CITATION

F., Musah, F., Lartey, A. O., Boakye, C., Awatey & J. P., Azumah "Assessing the Influence of COVID-19 on the Financial Performance of Schools in Ghana: Evidence from Private Schools in Ghana", *EAJIS*, vol. 8, no. 1, pp. 13-35, Jan. 2025.

MLA CITATION

Musah, Faisal, Felix Lartey, Abigail Owusu Boakye, Collins Awatey & John Paul Azumah. "Assessing the Influence of COVID-19 on the Financial Performance of Schools in Ghana: Evidence from Private Schools in Ghana". *East African Journal of Interdisciplinary Studies*, Vol. 8, no. 1, Jan. 2025, pp. 13-35, doi:10.37284/eajis.8.1.2620.

INTRODUCTION

The widespread impact of the COVID-19 pandemic across the globe has significantly affected numerous students, whose sudden transition to remote learning due to school closures has taken them, their families, and educators by surprise (Bansak & Starr, 2021). This disruption has resulted in the complete loss of classroom instruction for some students, while others have struggled with the challenges of online learning, including issues with internet connectivity, as well as psychosocial and motivational difficulties (Azevedo et al., 2021). James et al. (2021) posit that these challenges underscore a critical gap in emergency preparedness within the broader education sector, highlighting the need for comprehensive contingency planning and alternative management strategies. The preparedness of the education sector aims to safeguard the well-being of students and educators, devise strategies for the continuity of education, and preserve educational resources (Adomako et al., 2024), all of which ultimately contribute to ensuring resilience through education. According to Mills et al. (2023), the Disease Control Department of the Ghana Health Service has emphasized the importance of readiness and guidance for school-based epidemics, noting that outbreaks within schools can escalate into community-wide epidemics. Therefore, proactive planning and response efforts for such epidemics are essential not only for safeguarding the health and safety of school staff and students but also for protecting the broader community.

Mills et al. (2023) postulate that the COVID-19 pandemic has profoundly affected various sectors worldwide, including the education sector in Ghana. Private schools, which play a significant role in

providing education and contributing to the country's educational landscape, have faced unprecedented challenges due to the pandemic (Arrington, 2021). Prior to the pandemic, Salifu (2022) highlighted that private schools in Ghana were already grappling with various operational and financial challenges, including rising operational costs, competition from public schools, and fluctuating student enrollment. However, the emergence of COVID-19 introduced a new set of challenges that exacerbated these existing issues and posed significant threats to the financial sustainability of private schools (Stanistreet et al., 2021). Bansak et al. (2021) emphasize that a significant portion of global guidance provided to schools amidst the ongoing COVID-19 pandemic emphasizes prioritizing the safety and well-being of schools and educators through physical measures and ecological nonpharmaceutical interventions. This includes promoting awareness about daily preventive measures such as encouraging both staff and students to stay home when feeling unwell, practising proper respiratory hygiene by covering sneezes and coughs, maintaining regular hand hygiene by frequent handwashing, and regularly disinfecting high-touch surfaces and objects. Additionally, some schools are implementing community-based nonpharmaceutical interventions in regions with isolated coronavirus cases, such as enforcing social distancing measures of approximately three feet among individuals within school premises (Murphy et al., 2023). This flexibility extends to attendance and sick leave protocols, as well as the temporary suspension or cancellation of large-scale school events, and the temporary dismissal of students when deemed necessary.

The most important theories underlying this study are the institutional theory and resource dependence theory. According to Jepperson et al. (2021), the institutional theory emphasizes the role of societal norms, regulatory frameworks, and cultural expectations in shaping organizational behaviour. This theory helps to elucidate how schools' responses to the pandemic were influenced by broader institutional pressures, such as government policies, educational standards, and community expectations regarding education. Schools may have felt compelled to conform to these institutional norms to maintain legitimacy and ensure their continued operation during the pandemic. On the other hand, the resource dependence theory focuses on organizations' dependence on external resources and their strategies for managing resource dependencies in dynamic environments (Celtekligil, 2020). This theory helps to illuminate how schools navigated resource constraints and dependencies exacerbated by the pandemic. Schools may have sought to diversify their resource base, forge strategic partnerships with government agencies or community organizations, or innovate new revenue streams to mitigate the financial impact of enrollment declines and operational disruptions. Furthermore, the closure of schools as part of containment measures to curb the spread of the virus disrupted traditional modes of education delivery and revenue streams for private schools (Tumwesige, 2020). Schools were forced to transition to remote learning methods, which required investments in technology infrastructure, training of teachers, and adaptation of curriculum materials (Bozkurt et al., 2020). However, many private schools in Ghana, particularly those in rural or underserved areas, lacked the necessary resources and capacity to effectively implement remote learning, leading to disruptions in teaching and learning processes (Wolf et al., 2021). Furthermore, Alam et al. (2021) posit that the economic fallout of the pandemic, including job losses, income reductions, and economic uncertainty, impacted families' ability to pay school

fees and enrol their children in private schools. This resulted in declining student enrollment and revenue losses for private schools, further exacerbating their financial strain.

The outbreak of the coronavirus disease (COVID-19) has heightened tension and anxiety among Ghanaian citizens (Adom et al., 2021). Unlike other illnesses previously encountered in the country, this virus is highly transmissible and presents severe symptoms. Ensuring the continuation of high-quality education remotely, while also supporting the psychosocial well-being of both educators and students, is critical for effective preparedness and response (Iddi et al., 2021). According to Adom et al. (2021), the lack of research on planning for educational continuity is dire, as education itself serves as a form of psychosocial support that fosters overall well-being during disasters. Strategic investment in education-based psychosocial care and the promotion of social and emotional learning for children and youth affected by disasters can enhance their eagerness to learn (Asante et al., 2022). Psychosocial well-being is a crucial precursor to education and significantly influences the future prospects of both individuals and communities (Guoyan et al., 2023). Furthermore, extensive research conducted on the impact of COVID-19 on various sectors, including education and financial performance, reveals a significant gap in understanding the specific influence of the pandemic on the financial performance of private schools in Ghana. Numerous studies, such as those by Owusu-Fordjour et al. (2020), Sakpere et al. (2021), Tuffour et al. (2021), Acheampong (2023), and Upoalkpajor et al. (2020), have primarily focused on the educational disruptions caused by COVID-19. These studies examine student learning experiences, academic performance, and the challenges of remote learning, highlighting the negative effects on student engagement, access to education, and academic achievements. However, they do not delve into the financial implications for educational institutions themselves.

Additionally, research by Gaisani et al. (2021) and Rababah et al. (2020) investigates the financial impacts of COVID-19 on industries such as poultry farming and Chinese-listed companies, respectively. These studies use quantitative analyses to understand how the pandemic affected revenue, profitability, and overall financial health. While these insights are informative, they are sector-specific and do not address the unique financial challenges faced by private schools. Also, Du Plessis (2020) explored the impact of COVID-19 on the management of financial resources in South African public schools, highlighting issues related to budget constraints, fundraising, and fee management. However, this study is context-specific to South Africa and focuses on public schools, leaving a gap in understanding the financial dynamics within private educational institutions in Ghana. Moreover, the gap in previous studies lies in the absence of focused research on how COVID-19 has specifically affected the financial performance of private schools in Ghana. While the general educational impacts and financial challenges in other sectors are well-documented, there is a lack of empirical data and analysis on the financial repercussions faced by private schools during the pandemic. This gap is critical to address, considering that private schools often rely heavily on tuition fees and other private funding sources, which may have been significantly disrupted by the pandemic. This research will fill a critical void by assessing the financial impact of COVID-19 on private schools in the New Juaben Municipality, providing insights for stakeholders aiming to support the continuity and quality of education in Ghana.

Also, the COVID-19 epidemic is certainly not the last threat to school continuity, especially considering research on how climate change will affect the incidence of infectious diseases. Schools must urgently update their emergency preparedness plans by developing contingency strategies that address both school-based prevention and safety measures for epidemics and identify ways to

continue supporting and educating teachers and students if schools remain closed. Therefore, there is a pressing need for research to assess the impact of the COVID-19 pandemic on the financial performance of private schools in the New Juaben Municipality of Ghana, specifically to examine the impact of COVID-19 on student enrolment in private schools, analyze the effect of covid-19 on revenue mobilization for private schools and investigate the effect of covid-19 on operational costs for private schools.

LITERATURE REVIEW

Theoretical Review

The institutional theory and resource dependence theory provide valuable perspectives for understanding how private schools navigate external influences and adapt to changing environments, particularly during disruptions like the COVID-19 pandemic. Institutional theory emphasizes that organizations are shaped not only by internal factors but also by the broader environment, including societal norms, regulations, and cultural expectations (Lewis et al., 2019). In the context of private schools, the institutional environment encompasses factors such as government policies, educational standards, and cultural norms surrounding education. The onset of the COVID-19 pandemic introduced unprecedented challenges, causing disruptions to traditional teaching methods and financial strains due to decreased enrollment and operational constraints (Bozkurt et al., 2020). The theory is useful in analyzing how private schools responded to institutional pressures imposed by the pandemic. For instance, schools adapted by implementing remote learning initiatives, investing in technology, or adjusting tuition fees to remain competitive amidst economic uncertainty. Institutional theory also sheds light on the role of legitimacy and institutional isomorphism in shaping financial decisions during the pandemic (Shin, 2021). According to Díez-Martín et al. (2021), schools may have felt pressure to conform to societal

expectations regarding educational quality and accessibility, influencing decisions like investing in online learning platforms or maintaining staff salaries despite revenue losses. Moreover, institutional isomorphism suggests that schools within the same environment may adopt similar financial strategies, leading to a convergence in practices as they respond to shared challenges (Jaja et al., 2019).

On the other hand, resource dependence theory focuses on how organizations depend on external resources such as financial capital, human capital, and infrastructure to survive and thrive (Roundy & Bayer, 2019). During the pandemic, private schools faced significant challenges in resource acquisition and utilization, as lockdown measures and shifts to remote learning altered their operational landscape (Koç & Fidan, 2022). The theory explains how schools adapted their resource strategies to maintain financial viability. Nandi et al. (2021) highlight resource scarcity and dependence as key concepts, with schools becoming increasingly reliant on alternative revenue sources, government subsidies, and community partnerships to bridge financial gaps. The theory also underscores the importance of interdependencies and power dynamics in accessing critical resources, which influenced schools' financial decisions and their ability to adapt during the pandemic. Furthermore, resource buffering and resilience are central to the theory, where schools with diversified resource bases or financial reserves were better equipped to withstand the pandemic's financial impact (Ghosh, 2019). Government policies, regulatory frameworks, and social norms also played a role in shaping resource dependencies and access, highlighting the overlap between resource dependence and institutional factors (Shibin et al., 2020).

The two theories are interconnected in their examination of how external forces shape organizational responses and outcomes. An institutional theory emphasizes the role of societal norms and regulations in influencing organizational

behaviour (Lewis et al., 2019), while resource dependence theory focuses on organizations' strategies for managing resource dependencies (Roundy et al., 2019). Both perspectives offer a comprehensive framework for understanding how private schools in Ghana responded to the pandemic, navigated institutional pressures, and managed resource constraints to maintain financial sustainability and operational continuity. This interplay between societal expectations and resource management is crucial for explaining schools' adaptation strategies during crises like the COVID-19 pandemic.

The Concept of Coronavirus

COVID-19 is an infectious disease caused by a new coronavirus from the SARS-COV family (Ortiz-Prado et al., 2020; Yang & Wang, 2020). According to Chhikara et al. (2020), most people infected with COVID-19 experience mild to moderate respiratory illness and can recover without special treatment. However, Atzrodt et al. (2020) posit that older individuals and those with underlying health conditions such as diabetes, cardiovascular disease, cancer, and chronic respiratory illnesses are more likely to develop severe symptoms. An essential way to contain and slow the spread of the virus is through increased education on how it is transmitted and its symptoms. Protect yourself and others by regularly using an alcohol-based sanitiser or washing your hands and avoiding touching your face as World Health Organization recommends. Babbar and Gupta, (2022) emphasize that the onset of COVID-19 brought unprecedented changes across various sectors worldwide, with the education sector being one of the most affected. The virus, identified in December 2019, swiftly evolved into a global pandemic, compelling countries, including Ghana, as highlighted by Boateng et al. (2022) to implement stringent measures to curb its spread. These measures included lockdowns, social distancing mandates, and the closure of educational institutions. In Ghana, the impact of COVID-19 on the financial performance of schools, particularly

private schools was profound and multifaceted (Obeng et al., 2024). Private schools rely heavily on tuition fees and other student-related income streams for their operational and developmental activities. The abrupt closure of schools in March 2020 disrupted the academic calendar, halting traditional in-person learning (Conduah, 2024). This sudden closure meant that schools could no longer collect fees, leading to immediate financial distress. For many private schools, the revenue from tuition fees covers teachers' salaries, administrative costs, utility bills, and maintenance expenses. The absence of this income forced schools to make difficult financial decisions.

Furthermore, the switch to online learning, although a necessary adaptation, presented significant challenges for many private schools in Ghana (Agormedah et al., 2020; Adarkwah, 2021). The transition required substantial investments in digital infrastructure, including purchasing software, training teachers, and ensuring students had access to the necessary technology. For schools that were already financially strained, these additional costs exacerbated their economic woes. Additionally, the digital divide in Ghana meant that not all students could participate in online learning, leading to a decline in student enrollment and, consequently, a reduction in revenue (Sarpong et al., 2021; Adarkwah, 2021). Moreover, private schools often depend on extracurricular activities and events such as sports, cultural festivals, and parent-teacher meetings to generate supplementary income. The restrictions on gatherings and social activities due to COVID-19 meant that these events were cancelled, further diminishing the schools' financial inflows. The pandemic also affected parents' ability to pay tuition fees. Many families experienced job losses or reduced incomes, leading to delays or defaults in fee payments (Chen et al., 2022; Psacharopoulos et al., 2020). This ripple effect significantly impacted the cash flow of private schools, making it challenging to meet financial obligations.

Additionally, government support during the pandemic was limited, and private schools had to navigate these challenges with minimal external assistance (Boateng et al., 2022). Unlike public schools, which receive funding from the government, private institutions primarily depend on private funding and tuition fees. The lack of substantial financial aid from the government left private schools vulnerable, with some facing the threat of permanent closure (Alam & Tiwari, 2021; World Bank, 2020). In addition to immediate financial challenges, the long-term economic impact of COVID-19 on private schools remains uncertain (Altig et al., 2020). Schools had to reconsider their business models, explore new revenue streams, and implement cost-cutting measures to survive. The pandemic highlighted the need for financial resilience and adaptability in the face of crises (World Bank, 2020). Despite these challenges, the pandemic also spurred innovation and resilience among private schools. Many schools adopted hybrid learning models, combining online and in-person instruction to adapt to the evolving situation (Singh et al., 2021). Some schools leveraged this opportunity to improve their technological capabilities and enhance their educational offerings.

Effect of the Coronavirus on Education

Mustafa (2020) postulates that the 2019 coronavirus outbreak has significantly disrupted educational systems worldwide, leading to the nearly complete closure of schools, colleges, and universities. As of April 27, 2020, almost 1.725 billion learners are affected due to these closures (Shibuko, 2022). According to Olayinka (2022), UNICEF reports that 186 countries have implemented national or local closures, impacting about 98.5% of the global student population. School closures affect not only teachers, students, and families but also have extensive economic and societal implications (Hoffman & Miller, 2020; Radwan & Radwan, 2020). These closures have highlighted various social and economic issues such as homelessness,

digital learning, student debt, food insecurity, healthcare, childcare access, housing, disability services, and internet availability. Underprivileged families and their children are particularly impacted, facing interrupted learning, reduced nutrition, childcare challenges, and economic burdens due to parents being unable to work (Hanushek & Woessmann, 2020).

Efforts to curb the spread of COVID-19 through non-pharmaceutical interventions like self-isolation and social distancing have led to widespread closures of educational institutions in over 100 countries (Regmi & Lwin, 2021; Perra, 2021). According to Kim et al. (2020), mathematical models suggest that school closures can delay the spread of an outbreak. However, reopening schools after closures can sometimes lead to increased infection rates. Since school closures often occur alongside other interventions like bans on public gatherings, it is challenging to isolate their specific impact (Viner et al., 2020). Ager et al. (2024) postulate that during the pandemic, school closures and bans on public gatherings were associated with lower overall death rates. School closures were also found to reduce illness from the pandemic by up to 50% (Ryu & Cowling, 2021). Several countries successfully slowed the spread of infection through school closures during the COVID-19 epidemic. In Oita, Japan, school closures effectively reduced the number of infected students at the peak of the infection, though they did not significantly decrease the total number of infected students. Mandatory school closures and other social distancing measures were associated with a 29% to 37% reduction in the spread rates globally (Wu et al., 2022). Early school closures in the United States, for example, delayed the peak of the COVID-19 pandemic. Despite the overall success of school closures, a study by Liu et al. (2022) found that reactive school closures were not effective.

COVID-19 Impacts on Families

Families play a crucial role in education and are willing to make significant efforts to support a

child's learning, as described by Roksa and Kinsley, (2019). The recent global increase in home-based teaching might initially seem positive and potentially effective (Lee et al., 2021). However, this role is typically seen as supplementary to school efforts. Parents enhance a child's mathematics learning by practising counting or addressing simple math problems in daily life; they enrich history lessons with visits to museums or historical sites (Attisano, 2022; Kim, 2019). However, being the primary driver of learning, even with online materials, is a different challenge. While many parents successfully homeschool their children, it is unlikely to be feasible for the entire population (Bartholet, 2020). Global homeschooling will undoubtedly produce some inspiring moments, some frustrating moments, some funny moments, and some irritated moments, but it is very unlikely to replace the learning lost from school on average (Mathews, 2022; Steytler, 2019; Catlin, 2019). According to Mathews (2022), there will probably be significant disparities among families in how much they can support their children's learning. These differences will include the amount of time available for teaching, parents' non-cognitive skills, and their level of knowledge. It is hard to teach what you do not understand yourself. Consequently, this situation will likely lead to an increase in the disparity of human capital development among affected groups (Steytler, 2019).

Financial Performance

According to Gartenberg et al. (2019), financial performance refers to the measure of how well an organization can use its assets from its primary mode of business and generate revenues. In the context of private schools in Ghana, financial performance encompasses the schools' ability to manage their finances efficiently, generate sufficient income to cover their operational costs and achieve financial stability and growth (Manu et al., 2020; Salifu, 2022). The financial performance of schools is typically assessed through various financial metrics and indicators. These may include

revenue generation, cost management, profit margins, liquidity, and overall financial sustainability (Manu et al., 2020). For private schools, Kingdon (2020) emphasizes that tuition fees constitute the primary source of revenue. Other income streams may include fees for extracurricular activities, donations, grants, and income from school-owned facilities and services. Effective financial performance entails not only generating adequate revenue but also managing expenses prudently to ensure that the school remains financially viable (Salifu, 2022).

Furthermore, the revenue generation of private schools is heavily dependent on student enrollment and the timely payment of tuition fees (Salifu, 2022; Kingdon, 2020). A healthy enrollment rate ensures a steady flow of income, which is crucial for meeting the schools' financial obligations such as teachers' salaries, administrative expenses, utilities, and maintenance of school facilities. Any disruption to this revenue stream can have significant repercussions on the financial health of the schools. Also, Menifield (2020) posits that cost management is another critical aspect of financial performance where private schools must carefully balance their expenditures against their revenues to avoid deficits. This involves efficient budgeting, cost control measures, and strategic allocation of resources. Key areas of expenditure for private schools include salaries and benefits for staff, educational materials, utilities, maintenance of infrastructure, and investments in technology and infrastructure development (Fabre & Straub, 2019). During times of financial strain, schools may need to implement cost-cutting measures, such as reducing staff numbers, delaying capital projects, or cutting non-essential expenses, to maintain financial stability (Manu et al., 2020).

Also, as highlighted by Elmagrhi and Ntim, (2023), profit margins, although not the primary focus for non-profit educational institutions, are still an important indicator of financial performance. A positive profit margin indicates that the school is

generating more revenue than it is spending, allowing for the reinvestment of surplus funds into improving school facilities, expanding programs, and enhancing the overall quality of education (Potluka & Svecova, 2019). Conversely, negative profit margins can signal financial distress, necessitating immediate corrective actions to prevent further financial deterioration. Liquidity, or the ability to meet short-term financial obligations, is a crucial aspect of financial performance to enable schools to have sufficient cash flow to cover day-to-day expenses, such as payroll, utility bills, and other operating costs (Kinyanzii, 2023). According to Jackson and Schwarcz (2021), maintaining adequate liquidity requires careful financial planning and management, including the establishment of reserve funds to cushion against unexpected financial shocks.

The COVID-19 pandemic has posed significant challenges to the financial performance of private schools in Ghana (Kyei-Arthur & Aidoo, 2022). The closure of schools disrupted the regular collection of tuition fees, leading to a sharp decline in revenue (Alam & Tiwari, 2021). The transition to online learning required additional investments in digital infrastructure and training, further straining financial resources (Kyei-Arthur et al., 2022). Additionally, the economic impact of the pandemic on families resulted in delays or defaults in fee payments, exacerbating the schools' financial difficulties. Despite these challenges, some private schools have demonstrated resilience by adapting their business models and exploring alternative revenue streams (Upoalkpajor & Upoalkpajor, 2020). The financial performance of private schools during the pandemic highlights the importance of financial resilience and adaptability. Schools that have diversified their income sources implemented robust financial management practices, and maintained strong relationships with their stakeholders are better positioned to navigate financial challenges (DeMatthews et al., 2021).

Hypotheses

Drawing upon the in-depth review of existing scholarly works and the comprehensive theoretical framework outlined earlier, the following research hypotheses were posed to guide the study:

H₁: The COVID-19 pandemic has had a significant effect on students' enrollment in private schools in the New Juaben Municipality.

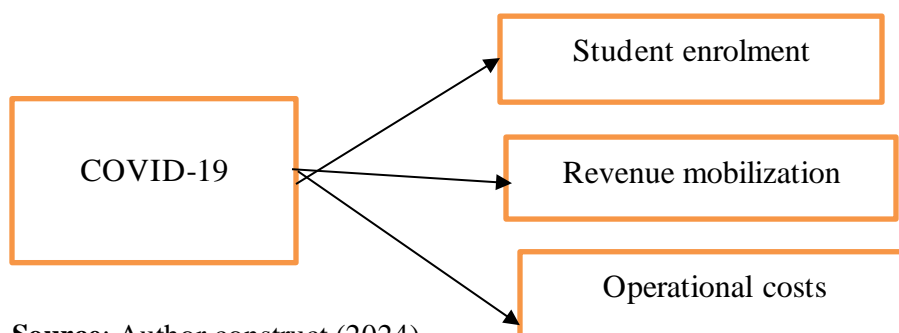
H₂: The COVID-19 pandemic has had a significant effect decrease in revenue mobilization for private schools in the New Juaben Municipality.

H₃: The COVID-19 pandemic has had a significant effect on operational costs for private schools in the New Juaben Municipality.

Conceptual Framework

The conceptual framework is drawn from the reviewed literature of the study. It examines how the COVID-19 pandemic, as the independent variable, has influenced three key dependent variables: student enrollment, revenue mobilization, and operational costs.

Figure 1: Conceptual framework of the study



Source: Author construct (2024)

RESEARCH METHODS

Research Approach and Design

The research approach and design are essential for aligning the research paradigm with data collection and analysis methods (Rahi, 2017). Strijker et al. (2020) outline three main research approaches: qualitative, quantitative, and mixed methods. Given the study's focus on understanding the impact of COVID-19 on private schools' financial performance, a quantitative approach is ideal as it allows for empirical analysis and generalizable findings (Kandel, 2020). While mixed methods provide complementary insights, this study prioritizes examining relationships using a structured quantitative approach. In terms of research design, Bell et al. (2022) describe it as the overall strategy for the study. An explanatory research design is most appropriate for establishing causal relationships between COVID-19 and financial performance variables, as it enables a

comprehensive examination of these relationships (Pandey et al., 2021). Descriptive and exploratory designs focus more on description and theory generation, making explanatory research a better fit for this study's objectives.

Population and Sampling Procedure

According to Basias et al. (2018), a study population refers to the complete group of individuals, events, objects, or elements to which the study's results are intended to be applied. According to the regional human resource manager of the New Juaben Municipal, there are a total of 73 private schools including crèche, kindergarten, primary, and junior high schools in the municipality. Additionally, there is a total of 588 staff in these schools. For this study, the population consists of all staff working in private schools within the municipality. Therefore, the target population comprises 73 schools and 588 staff of the municipality. The sampling procedure according to Gupta et al., (2022) involves creating

detailed procedures and practical methods for selecting samples to minimize potential errors. In this study, a simple random sampling technique was used to select 238 employees from a target population of 588. To determine the sample size, the Slovin (1973) formula, commonly used in social science research, was applied.

$$n = \frac{N}{1 + Ne^2}$$

n = sample, N = population, e = margin of error (5%)

$$n = \frac{588}{1 + 588(0.05)^2}$$

$$n = 588 \div 2.47$$

$$n = 238.05$$

$$n = 238$$

Therefore, the sample size for the study was 238 respondents.

The sample size for this study was determined using a multi-stage sampling technique, which incorporates census sampling, proportional stratified sampling, and lottery sampling. Firstly, for the selection of the schools, the census sampling technique was employed to include all 73 private schools. This technique involves encompassing all subjects within a population and is particularly suitable for smaller populations (Stratton, 2021). Regarding the staff, a proportional stratified sampling approach was used. To determine the specific sample size of employees for each school, the size of the school within the population was divided by the total population and then multiplied by the expected sample size. This calculation was performed using the equation $n/N \times S$, where n represents the size of the stratum, N represents the population size, and S represents the sample size. Finally, within each school, the sample unit was selected using the simple random technique, specifically the lottery method. The researcher obtained the staff list from the head teachers of each school establishment. Each staff in the sampling

frame was assigned a unique identity number randomly. These identity numbers were placed in a box and thoroughly mixed. The researcher then randomly selects respondents until the desired sample size of 238 was achieved. The simple random sampling technique ensures that every element in the sampling frame has an equal chance of being chosen.

Instrument for Data Collection

To gather data from respondents, a structured questionnaire was developed. The questionnaire consists of five-point Likert scale questions, ranging from 1 (strongly disagree) to 5 (strongly agree). The structured questionnaire was considered the most suitable data collection instrument for this study because, it allows for efficient data collection from a large number of respondents (Sileyew, 2019). Furthermore, in private schools, staff often have busy schedules, and it may be challenging to coordinate and conduct in-person interviews. The questionnaire allows respondents to independently read, comprehend, and respond to the questions at their convenience, eliminating the need for direct interaction. The structured questionnaire provides standardized questions and response options for all respondents. This ensures consistency in data collection, making it easier to compare and analyse responses across participants. It also minimizes the potential for interviewer bias that could arise in interviews, where the interviewer's influence may affect responses. Respondents may feel more comfortable providing honest and unbiased responses when using a structured questionnaire, as it offers a level of anonymity. Participants are more likely to express their true opinions and experiences without fear of judgment or reprisal. This can lead to more accurate and reliable data regarding COVID-19. The structured questionnaire simplifies the process of data coding and analysis. With standardized response options, data can be easily categorized, quantified, and entered into statistical software for further analysis. It facilitates the application of appropriate statistical techniques to

examine relationships between variables and test hypotheses.

Data Processing and Analysis

The data collected from respondents was analyzed using a combination of descriptive and inferential statistics. Prior to conducting the analysis, the data was carefully coded to minimize the risk of errors during the entry process. To further ensure the accuracy of the data, the researcher implemented the double-entry method, which involves entering the same data twice and comparing the two sets to identify and correct any discrepancies. While this approach is thorough and reliable, it can be time-consuming, yet it guarantees precision in the data handling process. Once the data had been properly processed, it was analyzed using descriptive statistics, such as tables, percentages, frequencies, and inferential statistics through structural equation modelling (SEM).

Descriptive statistics was used to summarize and present demographic information about the respondents, providing an overview of key characteristics such as age, gender, educational background, and other relevant factors. For the analysis of the research hypotheses, Smart PLS-SEM (Partial Least Squares Structural Equation Modelling) was used. Smart PLS SEM is particularly suited for this type of research because it excels in handling complex models with multiple variables and relationships. This method is ideal for

exploring the impact of the COVID-19 pandemic on the financial performance of private schools, as it allows for the simultaneous examination of multiple dependent and independent variables. Unlike traditional regression methods used in SPSS, Smart PLS SEM can assess both direct and indirect relationships among variables, making it highly effective for modelling latent constructs that cannot be directly observed. Moreover, Smart PLS-SEM is advantageous when dealing with small to medium sample sizes and data that may not follow a normal distribution, which is often the case in social science research. It is also particularly useful when the goal is prediction and theory development, making it an appropriate choice for understanding the multifaceted impact of the pandemic on schools.

RESULTS

Demographic Information

The descriptive assessment of the participants' demographic details was conducted through the utilization of frequencies and percentages. The demographic segment of the survey aimed to gather individual data about the staff. The choice of SPSS software was deemed suitable due to its compatibility with the primary data's characteristics and variable attributes. These demographic particulars encompass factors like gender, highest qualification, working experience, and age. The demographic insights of the respondents are visually represented in Table 1 below.

Table 1: Demographic Information of Respondent

Variables	Options	Frequency	Percentage (%)
Gender	Male	94	39.5
	Female	144	60.5
	Total	238	100.0
Highest qualification	Postgraduate degree	5	2.1
	First degree	75	31.5
	HND	26	10.9
	Diploma	68	28.6
	WASSCE	58	22.7
	Professional certificate	10	4.2
	Total	238	100.0
Working experience	Less than 5 years	109	45.8
	6 – 10 years	92	38.7

Age	Over 10 years	37	15.5
	Total	238	100.0
	Less than 29 years	100	42.0
	30 – 39 years	118	49.6
	Above 40 years	20	8.4
	Total	238	100.0

Source: Field Survey (2024)

Internal Consistency Reliability Assessment

According to Hair et al. (2020), a measurement model in a study is considered to have satisfactory internal consistency when the constructs within it exhibit composite reliability (ρ_A) and Cronbach Alpha scores that surpass the minimum threshold of 0.7. Additionally, Hajjar (2018) has suggested that when assessing the internal consistency reliability of a measurement model, the composite reliability

is regarded as the most robust or upper bound measure, while Cronbach Alpha is considered the lowest bound measure for evaluating internal consistency reliability. Furthermore, Research by (Nawi et al., 2020; Vermeijden et al., 2021; Hamzeh et al., 2021) have verified that to ensure dependable internal consistency, constructs should exhibit a Cronbach's Alpha value equal to or exceeding 0.7. All the constructs listed in Table 2 met this criterion.

Table 2: Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (ρ_a)	Composite reliability (ρ_c)	Average variance extracted (AVE)
Covid	0.881	0.933	0.908	0.666
Operational cost	0.827	0.840	0.886	0.661
Revenue mobilization	0.783	0.818	0.871	0.692
Student enrolment	0.772	0.901	0.856	0.666

Source: Field Survey (2024)

Discriminant Validity

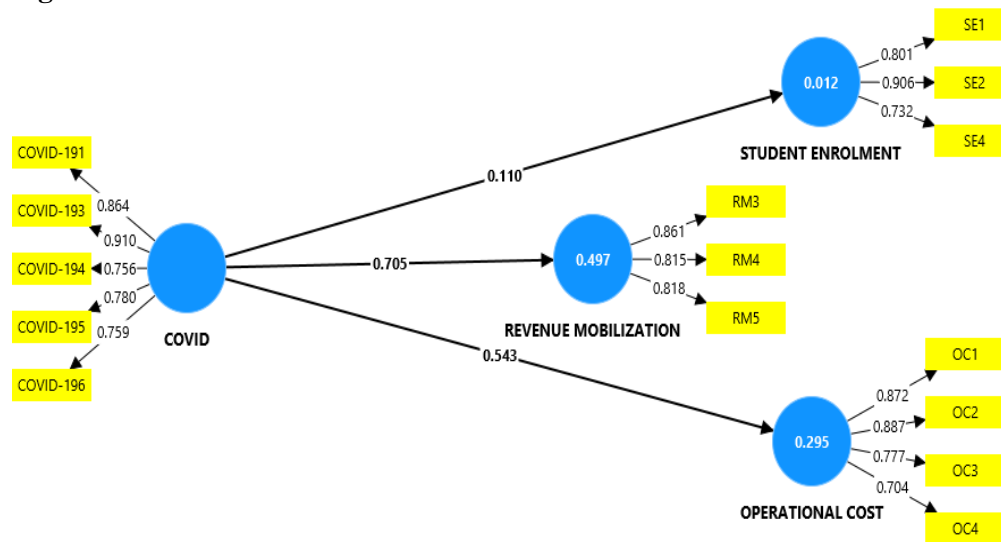
Table 3: HTMT Ratio Result: Discriminant Validity

	Covid	Operational cost	Revenue mobilization	Student enrolment
Covid				
Operational cost	0.580			
Revenue mobilization	0.746	0.809		
Student enrolment	0.117	0.103	0.138	

Source: Field Survey (2024)

Looking at Table 3, it becomes clear that there are no issues with discriminant validity for the constructs employed in the study. This is evident because none of the survey's constructs has a discriminant validity score exceeding 0.95, as per

the Heterotrait-Monotrait Ratio criterion (Benitez et al., 2020; Henseler et al., 2023). Consequently, the survey affirms that the discriminant validity of its constructs is robust and suitable for further statistical analysis.

Figure 2: The Measurement Model**Table 4: confirmatory Factor Loading**

	Covid	Operational cost	Revenue mobilization	Student enrolment
COVID-191	0.864			
COVID-193	0.910			
COVID-194	0.756			
COVID-195	0.780			
COVID-196	0.759			
OC1		0.872		
OC2		0.887		
OC3		0.777		
OC4		0.704		
RM3			0.861	
RM4			0.815	
RM5			0.818	
SE1				0.801
SE2				0.906
SE4				0.732

Source: Field Survey (2024)

The assessment of the measurement model involved performing confirmatory factor analysis (CFA) and eliminating items with loadings below 0.7. The findings presented in Table 4 demonstrate that the majority of indicators surpassed the recommended 0.7 threshold for factor loadings. As a result, items with loadings below 0.7 (COVID-192, COVID-197, COVID-198, SE3, SE5, SE6, RM1, RM2, and OC5) were excluded to improve the reliability and validity of the constructs. This indicates that the factors successfully measure the intended

constructs. A summary of the CFA results can be found in Table 4 above.

Collinearity Statistics (VIF)

According to Hair et al. (2020), when a construct exhibits a Variance Inflation Factor (VIF) value exceeding 5; it signifies a substantial level of collinearity within that construct. It is worth highlighting that this critical level of collinearity suggests the presence of significant multicollinearity among predictor variables, which can hinder the accurate estimation of reliable PLS-

SEM models. To be considered acceptable, the VIF should not surpass a threshold of 5, as outlined by Oke et al., (2019).

Table 5: Inner VIF Values

	VIF
Covid -> OC	1.000
Covid -> RM	1.000
Covid -> SE	1.000

Source: Field Survey (2024)

Coefficient of Determination

Table 6: R-squared (R²)

	R-square	R-square adjusted
OC	0.295	0.292
RM	0.497	0.495
SE	0.012	0.008

Source: Field Survey (2024)

Path Coefficient

Table 7 displays the outcomes of the PLS-SEM analysis through the path coefficient to identify

noteworthy path coefficients between independent and dependent variables in this study. The path coefficients are presented in Table 7 below.

Table 7: Path Coefficient

Variable	Path coefficients
Covid -> OC	0.543
Covid -> RM	0.705
Covid -> SE	0.110

Source: Field Survey (2024)

Hypothesis Testing

The hypothesis testing in this study provides insights into the relationship between the COVID-

19 pandemic and the financial performance of private schools. The findings are shown in Table 8 below.

Table 8: path coefficient (direct effect)

Path	Beta	STDEV	T statistics	P values	Hypothesis testing
Covid -> SE	0.110	0.083	1.324	0.185	Not Supported
Covid -> RM	0.705	0.024	29.859	0.000	Supported
Covid -> OC	0.543	0.053	10.186	0.000	Supported

Source: Field Survey (2024)

H₁: The COVID-19 pandemic has had a significant effect on student enrollment in private schools in the New Juaben Municipality.

Based on the data, the path coefficient for the relationship between COVID-19 and student enrollment is 0.110, indicating a weak positive

effect. However, the T statistic of 1.324 is below the generally accepted threshold for significance, and the P value of 0.185 is greater than 0.05. Therefore, there is no statistically significant relationship between COVID-19 and student enrollment in private schools. This suggests that the hypothesis is

not supported by the data, meaning the pandemic did not significantly affect student enrollment. Although it is possible that enrollment was impacted in some schools, the overall trend does not show a dramatic drop in student numbers.

H₂: The COVID-19 pandemic has had a significant effect on the decrease in revenue mobilization for private schools in the New Juaben Municipality.

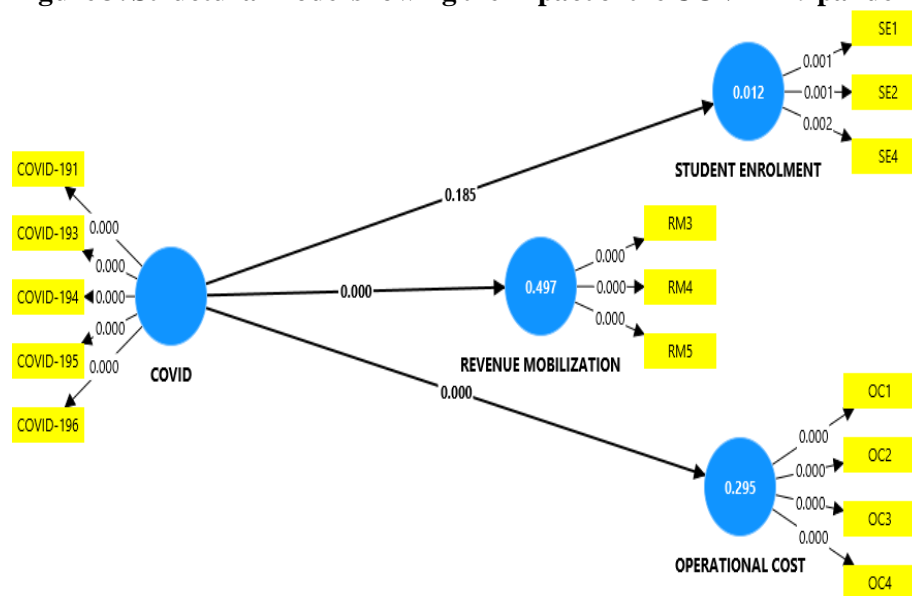
The path coefficient between COVID-19 and revenue mobilization is 0.705, showing a strong positive effect. This is further reinforced by a high T statistic of 29.859 and a P value of 0.000, which indicates a highly significant relationship. The data strongly supports this hypothesis, as it is clear that the COVID-19 pandemic had a major impact on the ability of private schools to mobilize revenue. Schools likely faced challenges such as parents struggling to pay fees on time, economic difficulties, and disruptions in financial flows during the pandemic. The significant reduction in revenue mobilization highlights a critical financial burden faced by schools during the pandemic period.

H₃: The COVID-19 pandemic has had a significant effect on operational costs for private schools in the New Juaben Municipality.

The relationship between COVID-19 and operational costs also shows a significant result, with a path coefficient of 0.543. The T statistic of 10.186 and the P value of 0.000 demonstrate that this relationship is statistically significant. Thus, the result supports this hypothesis, showing that the pandemic significantly increased operational costs for private schools. The increased costs could be linked to the need for health and safety measures, new infrastructure for online learning, and other pandemic-related adjustments that schools had to adopt. This upward pressure on costs adds another layer of financial stress for schools already struggling with revenue mobilization.

Therefore, of the three hypotheses, H₂ and H₃ are supported by the data, showing that the COVID-19 pandemic had a significant negative impact on both revenue mobilization and operational costs for private schools in the New Juaben Municipality while, H₁ is not supported by the data, indicating that student enrollment was not significantly affected by the pandemic, at least within the scope of this study.

Figure 3: Structural model showing the impact of the COVID-19 pandemic on financial performance.



Source: Field Survey (2024)

DISCUSSIONS

The result in Table 8 revealed no significant effect of COVID-19 on student enrollment in private schools, contradicting the expected outcome. Although previous studies, such as those by Sarpong et al. (2021) and Adarkwah (2021), highlighted a decline in student enrollment due to the digital divide and difficulties in transitioning to online learning, this was not reflected in the findings for private schools in New Juaben. It is possible that these schools were able to maintain enrollment despite challenges, or it affirms parents' or guardians' willingness to educate their wards. Additionally, as Obeng et al. (2024) discuss, while many schools across Ghana struggled with retaining students during the pandemic, the overall student enrollment in New Juaben may have been buffered by specific community support or resilience. The inconsistency between the finding and the reviewed literature suggests that while enrollment may have been expected to decrease, the impact was less severe in this particular context.

Also, the significant effect of COVID-19 on revenue mobilization aligns with the literature, which discusses the substantial financial strain placed on private schools. According to Conduah (2024) and Boateng et al. (2022), the abrupt closure of schools led to a disruption in tuition fee collection, severely impacting revenue streams. As schools heavily depend on tuition fees to cover operational costs, the inability of parents to pay fees due to economic hardships exacerbated the situation (Chen et al., 2022; Psacharopoulos et al., 2020). This aligns with the finding of a strong path coefficient between COVID-19 and revenue mobilization, reflecting how the pandemic placed considerable financial burdens on these schools. The reviewed literature further emphasizes that private schools were forced to make difficult financial decisions, such as reducing staff or delaying infrastructure projects (Salifu, 2022; Manu et al., 2020). The pandemic-induced financial crisis was compounded by a lack of government support

for private institutions (Boateng et al., 2022), leaving many schools vulnerable, as highlighted in global reports (Alam & Tiwari, 2021; World Bank, 2020). This finding reinforces the idea that private schools in New Juaben were not immune to the widespread financial difficulties facing the education sector during the pandemic.

Furthermore, the literature supports the significant effect of COVID-19 on operational costs. Agormedah et al. (2020) and Adarkwah (2021) describe the additional financial pressures private schools faced as they shifted to online learning, including the need for digital infrastructure and teacher training. The increase in operational costs is consistent with the findings of Kyei-Arthur and Aidoo (2022), who emphasize that transitioning to remote learning required schools to invest in technology and ensure students had access to learning materials. This rise in operational costs is further exacerbated by the need to implement health and safety protocols when schools reopen, adding yet another layer of expenses. The reviewed literature consistently portrays how the pandemic forced schools to adapt at great financial cost, aligning with the study's findings that operational costs significantly increased during this period. These increased expenditures, combined with declining revenue, resulted in immense financial stress for private schools.

CONCLUSIONS

Regarding hypothesis one, the study concludes that although there may have been some isolated cases of reduced enrollment, the overall trend indicates that the pandemic did not lead to a major decline in student numbers. Also, the study strongly supports the hypothesis that the COVID-19 pandemic significantly affected the ability of private schools to mobilize revenue. The study concluded that private schools faced severe financial challenges during the pandemic, likely due to delayed fee payments, economic difficulties faced by parents, and disruptions in financial flows. This led to a substantial decrease in revenue, highlighting the

financial vulnerability of these institutions during the pandemic. Furthermore, the research unequivocally supports the hypothesis that the study also confirms that the pandemic significantly increased operational costs for private schools. Hence, the study concludes these costs rose due to the need for health and safety measures, investment in online learning infrastructure, and other pandemic-related adjustments. The increased financial burden further compounded the challenges faced by private schools, which were already struggling with reduced revenue.

Recommendations

Given that revenue mobilization has been substantially affected, school owners must re-evaluate and strengthen their financial management strategies. The significant reduction in revenue during the pandemic underscores the need for developing more resilient financial practices. This might involve diversifying income streams beyond traditional tuition fees. Schools could explore options such as offering online courses, establishing partnerships with local businesses, or securing grants and donations. These measures can help stabilize financial resources and reduce dependency on a single source of revenue. In addition to addressing revenue challenges, private school owners should focus on managing increased operational costs. The pandemic has brought about unexpected expenses related to health and safety measures, online learning infrastructure, and other necessary adjustments. To counter these rising costs, schools should conduct a comprehensive review of their operational expenses. Identifying areas where costs can be minimized or streamlined is essential. For instance, investing in energy-efficient technologies and renegotiating contracts with suppliers can lead to significant savings. Also, engaging with the school community remains a vital component of navigating these financial challenges. School owners should maintain open lines of communication with parents and stakeholders, providing transparent updates on the school's

financial status and any changes to fee structures. This engagement can foster a sense of shared responsibility and support during financially strained times.

Suggestions for Further Research

This study adopted the quantitative research approach to examine the relationship between variables, the study recommends future researchers complement quantitative research with qualitative studies to gain deeper insights into the COVID-19 impact on financial performance and if possible, conduct longitudinal studies to track changes to enhance the degree of generalizability.

REFERENCE

- Acheampong, J. O. (2023). The impact of COVID-19 on students' academic performance: The case of the University of Ghana Business School. *Cogent Education*, 10(1), 2186011.
- Adarkwah, M. A. (2021). "I'm not against online teaching, but what about us?" ICT in Ghana post Covid-19. *Education and information technologies*, 26(2), 1665-1685
- Adarkwah, M. A. (2021). An Outbreak of Online Learning in the COVID-19 Outbreak in Sub-Saharan Africa: Prospects and Challenges. *Online Submission*, 21(2), 1-10.
- Adom, P. K., Agradi, M., & Vezzulli, A. (2021). Energy efficiency-economic growth nexus: what is the role of income inequality? *Journal of Cleaner Production*, 310, 127382.
- Adomako, S., Liu, X., Sarala, R. M., Ahsan, M., Lee, J. Y., & Shenkar, O. (2024). Multinational corporations and social innovation in emerging markets. *Management International Review*, 1-21.
- Ager, P., Eriksson, K., Karger, E., Nencka, P., & Thomasson, M. A. (2024). School closures during the 1918 flu pandemic. *Review of Economics and Statistics*, 106(1), 266-276.

- Agormedah, E. K., Henaku, E. A., Ayite, D. M. K., & Ansah, E. A. (2020). Online learning in higher education during COVID-19 pandemic: A case of Ghana. *Journal of Educational Technology and Online Learning*, 3(3), 183-210.
- Alam, A., & Tiwari, P. (2021). Implications of COVID-19 for low-cost private schools. UNICEF, Issue Brief, (8).
- Arrington, N. B. (2021). Judicial merit selection: Beliefs about fairness and the undermining of gender diversity on the bench. *Political Research Quarterly*, 74(4), 1152-1167.
- Asante, R., Faibil, D., Agyemang, M., & Khan, S. A. (2022). Life cycle stage practices and strategies for circular economy: assessment in construction and demolition industry of an emerging economy. *Environmental Science and Pollution Research*, 29(54), 82110-82121.
- Attisano, E. (2022). Investigating children's naturalistic explorations in a living history museum.
- Atzrodt, C. L., Maknojia, I., McCarthy, R. D., Oldfield, T. M., Po, J., Ta, K. T., ... & Clements, T. P. (2020). A Guide to COVID-19: a global pandemic caused by the novel coronavirus SARS-CoV-2. *The FEBS journal*, 287(17), 3633-3650.
- Azevedo, J. P., Hasan, A., Goldemberg, D., Geven, K., & Iqbal, S. A. (2021). Simulating the potential impacts of COVID-19 school closures on schooling and learning outcomes: A set of global estimates. *The World Bank Research Observer*, 36(1), 1-40.
- Babbar, M., & Gupta, T. (2022). Response of educational institutions to COVID-19 pandemic: An inter-country comparison. *Policy Futures in Education*, 20(4), 469-491.
- Bansak, C., & Starr, M. (2021). Covid-19 shocks to education supply: how 200,000 US households dealt with the sudden shift to distance learning. *Review of Economics of the Household*, 19(1), 63-90.
- Bartholet, E. (2020). Homeschooling: Parent rights absolutism vs. child rights to education & protection. *Ariz. L. Rev.*, 62, 1.
- Basias, N., & Pollalis, Y. (2018). Quantitative and qualitative research in business & technology: Justifying a suitable research methodology. *Review of Integrative Business and Economics Research*, 7, 91-105.
- Bell, E., Bryman, A., & Harley, B. (2022). *Business research methods*. Oxford University Press, 13(1), 84-111.
- Benitez, J., Henseler, J., Castillo, A., & Schuberth, F. (2020). How to perform and report an impactful analysis using partial least squares: Guidelines for confirmatory and explanatory IS research. *Information & Management*, 57(2), 103-168.
- Boateng, F. G., Kusi, S., & Ametepey, S. (2022). COVID-19 lockdown defiance, public 'indiscipline', and criminalisation of vulnerable populations in Ghana. *African Review of Economics and Finance*, 14(2), 142-159.
- Bozkurt, A., Jung, I., Xiao, J., Vladimirsch, V., Schuwer, R., Egorov, G., ... & Paskevicius, M. (2020). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*, 15(1), 1-126.
- Catlin, M. L. (2019). *The experience of being a homeschool mother: A heuristic inquiry* (Doctoral dissertation, Capella University).
- Celtekligil, K. (2020). Resource dependence theory. *Strategic Outlook for Innovative Work Behaviours: Interdisciplinary and Multidimensional Perspectives*, 131-148.

- Chen, C. Y. C., Byrne, E., & Vélez, T. (2022). Impact of the 2020 pandemic of COVID-19 on Families with School-aged Children in the United States: Roles of Income Level and Race. *Journal of Family Issues*, 43(3), 719-740.
- Chhikara, B. S., Rathi, B., Singh, J., & Poonam, F. N. U. (2020). Coronavirus SARS-CoV-2 disease COVID-19: Infection, prevention and clinical advances of the prospective chemical drug therapeutics. *Chemical Biology Letters*, 7(1), 63-72.
- Conduah, A. K. (2024). COVID-19's Dual Effects: Shifting Demographic Trends and Public Health Infrastructure in Ghana. *Recent Updates in Disease and Health Research*, 59.
- DeMatthews, D. E., Serafini, A., & Watson, T. N. (2021). Leading inclusive schools: Principal perceptions, practices, and challenges to meaningful change. *Educational Administration Quarterly*, 57(1), 3-48.
- Díez-Martín, F., Blanco-González, A., & Díez-de-Castro, E. (2021). Measuring a scientifically multifaceted concept, The jungle of organizational legitimacy. *European Research on Management and Business Economics*, 27(1), 100131.
- Du Plessis, P. (2020). Implications of COVID-19 on the management of school financial resources in quintile 5 public schools. *South African Journal of Education*, 40(4).
- Elmagrhi, M. H., & Ntim, C. G. (2023, April). Non-financial reporting in non-profit organisations: the case of risk and governance disclosures in UK higher education institutions. In *Accounting Forum* (Vol. 47, No. 2, pp. 223-248). Routledge.
- Fabre, A., & Straub, S. (2019). The economic impact of public private partnerships (PPPs) in infrastructure, health and education: A review. *Toulouse School of Economics*.
- Gaisani, M. P., Fahmi, I., & Sasongko, H. (2021). The effect of covid-19 on the financial performance of Indonesia's livestock industry. *Jurnal Manajemen & Agribisnis*, 18(3), 229-229.
- Gartenberg, C., Prat, A., & Serafeim, G. (2019). Corporate purpose and financial performance. *Organization Science*, 30(1), 1-18.
- Ghosh, B. N. (2019). *Dependency theory revisited*. Routledge.
- Guoyan, W. A. N. G., & Ying, L. I. U. (2023). Development trend and countermeasures for China's international academic journals in humanities and social sciences. *Chinese Journal of Scientific and Technical Periodicals*, 34(6), 722.
- Gupta, A., & Gupta, N. (2022). *Research methodology*. SBPD Publications.
- Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101-110.
- Hajjar, S. T. (2018). Statistical analysis: Internal-consistency reliability and construct validity. *International Journal of Quantitative and Qualitative Research Methods*, 6(1), 27-38.
- Hamzeh, H. H., & Alworikat, N. A. (2021). Cross cultural adaptation, reliability and construct validity of the Boston Carpal Tunnel Questionnaire in standard Arabic language. *Disability and Rehabilitation*, 43(3), 430-435.
- Hanushek, E. A., & Woessmann, L. (2020). The economic impacts of learning losses.
- Henseler, J., & Schuberth, F. (2023). Partial least squares as a tool for scientific inquiry:

- Comments on Cadogan and Lee. *European Journal of Marketing*, 57(6), 1737-1757.
- Hoffman, J. A., & Miller, E. A. (2020). Addressing the consequences of school closure due to COVID-19 on children's physical and mental well-being. *World medical & health policy*, 12(3), 300-310.
- Iddi, S., Obiri-Yeboah, D., Aboh, I. K., Quansah, R., Owusu, S. A., Enyan, N. I. E., ... & Armah, F. A. (2021). Coping strategies adapted by Ghanaians during the COVID-19 crisis and lockdown: A population-based study. *Plos one*, 16(6), e0253800.
- Jaja, S. A., Gabriel, J. M. O., & Wobodo, C. C. (2019). Organizational isomorphism: The quest for survival. *Noble International Journal of Business and Management Research*, 3(5), 86-94.
- James, P. D., Connell, N. T., Ameer, B., Di Paola, J., Eikenboom, J., Giraud, N., & Mustafa, R. A. (2021). ASH ISTH NHF WFH 2021 guidelines on the diagnosis of von Willebrand disease. *Blood Advances*, 5(1), 280-300.
- Jepperson, R. L., & Meyer, J. W. (2021). *Institutional theory: The cultural construction of organizations, states, and identities*. Cambridge University Press.
- Kandel, B. (2020). Qualitative Versus Quantitative Research. *Journal of Product Innovation Management*, 32(5), 658.
- Kim, H. (2019). Acculturation and Development of Korean American Parents and Their Perspectives on Mathematics Education. Columbia University.
- Kim, S., Kim, Y. J., Peck, K. R., & Jung, E. (2020). School opening delay effect on transmission dynamics of coronavirus disease 2019 in Korea: based on mathematical modeling and simulation study. *Journal of Korean Medical Science*, 35(13).
- Kingdon, G. G. (2020). The private schooling phenomenon in India: A review. *The Journal of Development Studies*, 56(10), 1795-1817.
- Kinyanzii, J. M. (2023). Influence of financial management practices on the financial performance of public secondary schools in Kathiani sub-county (Doctoral dissertation).
- Koç, M. H., & Fidan, T. (2022). The comparison of the adaptation of public and private school teachers to distance education during the COVID19 pandemic. *International and Multidisciplinary Journal of Social Sciences*, 11(1), 27-53.
- Kyei-Arthur, F., & Aidoo, D. A. (2022). Online Learning Resources, Challenges, and Coping Strategies of Low-Fee Private Schools in Ghana During COVID-19 Pandemic. *European Journal of Interactive Multimedia and Education*, 3(2), e02214.
- Lee, S. J., Ward, K. P., Chang, O. D., & Downing, K. M. (2021). Parenting activities and the transition to home-based education during the COVID-19 pandemic. *Children and Youth Services Review*, 122, 105585.
- Lewis, A. C., Cardy, R. L., & Huang, L. S. (2019). Institutional theory and HRM: A new look. *Human resource management review*, 29(3), 316-335.
- Liu, L., Iketani, S., Guo, Y., Chan, J. F. W., Wang, M., Liu, L., ... & Ho, D. D. (2022). Striking antibody evasion manifested by the Omicron variant of SARS-CoV-2. *Nature*, 602(7898), 676-681.
- Manu, B. D., Zhang, H., Oduro, D., Krampah-Nkoom, A., Mensah, I. A., Anaba, O. A., & Isaac, A. (2020). School board efficiency in financial management and human resource in public senior high schools: An evidence from Ashanti region, Ghana. *Int'l J. Soc. Sci. Stud.*, 8, 79.

- Mathews, K. R. (Ed.). (2022). This is Homeschooling: Stories of Unconventional Learning Practices on the Road and in Nature. Taylor & Francis.
- Menifield, C. E. (2020). The basics of public budgeting and financial management: A handbook for academics and practitioners. Hamilton Books.
- Murphy, D. M., Cox, D. J., Connolly, S. A., Breen, E. P., Brugman, A. A., Phelan, J. J., ... & Basdeo, S. A. (2023). Trained immunity is induced in humans after immunization with an adenoviral vector COVID-19 vaccine. *The Journal of Clinical Investigation*, 133(2).
- Mustafa, N. (2020). Impact of the 2019–20 coronavirus pandemic on education. *International Journal of Health Preferences Research*, 4(1), 25-30.
- Nandi, S., Sarkis, J., Hervani, A., & Helms, M. (2021). Do blockchain and circular economy practices improve post COVID-19 supply chains? A resource-based and resource dependence perspective. *Industrial Management & Data Systems*, 121(2), 333-363.
- Nawi, F. A. M., Tambi, A. M. A., Samat, M. F., & Mustapha, W. M. W. (2020). A review on the internal consistency of a scale: the empirical example of the influence of human capital investment on Malcom Baldrige quality principles in TVET institutions. *Asian People Journal (APJ)*, 3(1), 19-29.
- Obeng Amanfo Ofori, A., Arthur, B., Asiedu, M., Nyantakyi, G., & Opoku, P. (2024). The impact of COVID-19 pandemic on financial reporting delay. Evidence from Ghana. *Cogent Business & Management*, 11(1), 2318019.
- Oke, J., Akinkunmi, W. B., & Etebefia, S. O. (2019). Use of correlation, tolerance and variance inflation factor for multicollinearity test. *GSIJ*, 7(5).
- Olayinka, O. F. (2022). Non-Pharmaceutical Management of Covid-19 Pandemic: The Effect on Access to University Education In Nigeria. *The Eastern African Law Review*, 48(1).
- Ortiz-Prado, E., Simbaña-Rivera, K., Gómez-Barreno, L., Rubio-Neira, M., Guaman, L. P., Kyriakidis, N. C., & López-Cortés, A. (2020). Clinical, molecular and epidemiological characterization of the SARS-CoV-2 virus, and the Coronavirus Disease 2019 (COVID-19). A comprehensive literature review. *Diagnostic microbiology and infectious disease*, 98(1), 115094.
- Owusu-Fordjour, C., Koomson, C. K., & Hanson, D. (2020). The impact of COVID-19 on learning-the perspective of the Ghanaian student. *European Journal of Education Studies*.
- Pandey, P., & Pandey, M. M. (2021). Research methodology tools and techniques. Bridge Center.
- Perra, N. (2021). Non-pharmaceutical interventions during the COVID-19 pandemic: A review. *Physics Reports*, 913, 1-52.
- Potluka, O., & Svecova, L. (2019). The effects of external financial support on the capacities of educational nonprofit organizations. *Sustainability*, 11(17), 4593
- Psacharopoulos, G., Collis, V., Patrinos, H. A., & Vegas, E. (2020). Lost wages: The COVID-19 cost of school closures. Available at SSRN 3682160.
- Rababah, A., Al-Haddad, L., Sial, M. S., Chunmei, Z., & Cherian, J. (2020). Analyzing the effects of COVID-19 pandemic on the financial performance of Chinese listed companies. *Journal of Public Affairs*, 20(4), e2440.

- Radwan, A., & Radwan, E. (2020). Social and Economic Impact of School Closure during the Outbreak of the COVID-19 Pandemic: A Quick Online Survey in the Gaza Strip. *Pedagogical Research*, 5(4).
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5.
- Regmi, K., & Lwin, C. M. (2021). Factors associated with the implementation of non-pharmaceutical interventions for reducing coronavirus disease 2019 (COVID-19): a systematic review. *International journal of environmental research and public health*, 18(8), 4274.
- Roksa, J., & Kinsley, P. (2019). The role of family support in facilitating academic success of low-income students. *Research in Higher Education*, 60, 415-436.
- Roundy, P. T., & Bayer, M. A. (2019). To bridge or buffer? A resource dependence theory of nascent entrepreneurial ecosystems. *Journal of Entrepreneurship in Emerging Economies*, 11(4), 550-575
- Ryu, S., & Cowling, B. J. (2021). Human influenza epidemiology. *Cold Spring Harbor Perspectives in Medicine*, 11(12), a038356.
- Sakpere, A. B., Oluwadebi, A. G., Ajilore, O. H., & Malaka, L. E. (2021). The impact of COVID-19 on the academic performance of students: a psychosocial study using association and regression model. *International Journal of Education and Management Engineering*, 11(5), 32.
- Salifu, I. (2022). State-funded secondary education policy: Implications for private school management in Ghana. *Leadership and Policy in Schools*, 21(4), 719-732.
- Sarpong, S. A., Dwomoh, G., Boakye, E. K., & Ofosua-Adjei, I. (2021). Online teaching and learning under COVID-19 pandemic; perception of university students in Ghana. *European Journal of Interactive Multimedia and Education*, 3(1), e02203.
- Shibin, K. T., Dubey, R., Gunasekaran, A., Hazen, B., Roubaud, D., Gupta, S., & Foropon, C. (2020). Examining sustainable supply chain management of SMEs using resource based view and institutional theory. *Annals of Operations Research*, 290, 301-326
- Shibuko, K. C. (2022). Effects of COVID-19-related School Closures on Pupils' Academic Performance in Public Primary Schools in Vihiga Sub-county, Vihiga County, Kenya (Doctoral dissertation, University of Nairobi).
- Shin, Y. (2021). The Institutionalization of Online Education Before and During the Covid-19 Pandemic: an Analysis of Universities' Discourse Use (Doctoral dissertation, The University of Arizona).
- Sileyew, K. J. (2019). Research design and methodology. *Cyberspace*, 1-12.
- Singh, J., Steele, K., & Singh, L. (2021). Combining the best of online and face-to-face learning: Hybrid and blended learning approach for COVID-19, post vaccine, & post-pandemic world. *Journal of Educational Technology Systems*, 50(2), 140-171.
- Stanistreet, P., Elfert, M., & Atchoarena, D. (2021). Education in the age of COVID-19: Implications for the future. *International Review of Education*, 67(1), 1-8.
- Steytler, J. R. (2019). Homeschooling in South Africa: a multiple case study (Doctoral dissertation).

- Stratton, S. J. (2021). Population research: convenience sampling strategies. *Prehospital and disaster Medicine*, 36(4), 373-374.
- Strijker, D., Bosworth, G., & Bouter, G. (2020). Research methods in rural studies: Qualitative, quantitative and mixed methods. *Journal of Rural Studies*, 78, 262-270.
- Tuffour, A. D., Cobbinah, S. E., Benjamin, B., & Otibua, F. (2021). Impact of COVID-19 pandemic on education sector in Ghana: Learner challenges and mitigations. *Research Journal in Comparative Education*, 2(1).
- Tumwesige, J. (2020). COVID-19 Educational disruption and response: Rethinking e-Learning in Uganda. *University of Cambridge*.
- Upoalkpajor, J. L. N., & Upoalkpajor, C. B. (2020). The impact of COVID-19 on education in Ghana. *Asian journal of education and social studies*, 9(1), 23-33.
- Vermeijden, H. D., Yang, X. A., van der List, J. P., & DiFelice, G. S. (2021). Reliable internal consistency and adequate validity of the forgotten joint score-12 after primary anterior cruciate ligament repair. *Arthroscopy, Sports Medicine, and Rehabilitation*, 3(3), e893-e900.
- Viner, R. M., Russell, S. J., Croker, H., Packer, J., Ward, J., Stansfield, C., ... & Booy, R. (2020). School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. *The Lancet Child & Adolescent Health*, 4(5), 397-404.
- Wolf, C., Levi, T., Ripple, W. J., Zárrate-Charry, D. A., & Betts, M. G. (2021). A forest loss report card for the world's protected areas. *Nature Ecology & Evolution*, 5(4), 520-529.
- World Bank. (2020). The COVID-19 pandemic: Shocks to education and policy responses. World Bank
- Wu, J. T., Mei, S., Luo, S., Leung, K., Liu, D., Ly, Q., ... & Leung, G. M. (2022). A global assessment of the impact of school closure in reducing COVID-19 spread. *Philosophical Transactions of the Royal Society A*, 380(2214), 20210124.
- Yang, P., & Wang, X. (2020). COVID-19: a new challenge for human beings. *Cellular & molecular immunology*, 17(5), 555-557.