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Forgotten frontline workers in higher education: Aiding Ghana in the COVID-19 recovery process

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ABSTRACT

The sudden emergence of the COVID-19 triggered a chain of events in the global education system; suspended onsite instruction; migration to online learning; adoption of mobile technologies for mobile learning, and diverse technological innovations. All this was done with the objective of adhering to COVID-19 lockdown protocols to speed global recovery from the disruptive effect of the COVID-19 crisis. In many countries, online learning became the only legal means to achieve lifelong and progressive education for over 91% of the world's student population whose education was at risk. Stakeholders in higher education (parents, students, teachers, and administrators) across the globe also became "frontline workers" in a collective effort to combat the spread of the virus. The study explores the integral role of these frontline workers in curbing the virus. The researchers draw from qualitative interviews involving twenty (20) tertiary students in Ghana who experienced a physical resumption of school in 2021. Findings suggest that a policy shift by school leaders led to the adoption of a multi-track year-round education (MT-YRE) system to promote social distancing. Students were provided with personal protective equipment (PPEs), teachers educated students on COVID-19 prevention and fostered good relationships with their students. Students adhered to institutional protocols to study. Parents also provided psychological and financial support. Policymakers in education should provide clear guidelines, resources, funds, and recognition to school stakeholders as they collectively tackle the virus to ensure economic, health, and education recovery post-COVID-19. Future studies should focus on how to establish a crisis-management framework for higher education.

1. Introduction

For more than a year now the world has been grappling with an unexpected and unprecedented global emergency in the form of the novel coronavirus disease, also known as the COVID-19. Since the declaration of the COVID-19 as a pandemic by the World Health Organization (WHO) on March 11, 2020, there has comprehensive efforts from key players in government and relevant institutions to contain the crisis (WHO, 2020a). Although the COVID-19 primarily started as a health problem, its spillover effects have wreaked havoc in the economic and education sector worldwide. As we write this article, the death toll from the virus keeps adding up, many economies are in recession, and a lot of educational institutions have shut down or have temporarily adopted online/blended learning (Adarkwah, 2021a; Acheampong and Agyemang, 2021; Agormedah et al., 2020). In the field of health, there has been relentless efforts to reduce the morbidity and mortality rates such as through vaccine development and trials (Forni and Mantovani, 2021). The WHO data suggest that the global COVID-19 confirmed cases as of the June 14, 2022 is 533,816,957 including 6,309.633 deaths. As of the June 15, 2022, Ghana has recorded 186 new COVID-19 cases, 837 active cases, 162,646 confirmed cases, 160,364 recoveries/discharge, and 1,445 deaths (Ghana Health Service, 2022). The timely intervention by stakeholders in education (school leaders, teachers, students, and parents/caregivers) is heroic and worth discussing. Thanks to the coordinated efforts of these stakeholders in education, the disruption in education has not been perpetual. The genuine efforts to avert unforeseen outcomes of the crisis have inspired hope in the 91% of the world's student population who could not continue their education because of the sudden disruption (UNESCO, 2020). For example, in Ghana, these four key players in education have been on top of the unfortunate

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situation since its inception. Although the Ghanaian government was not proactive enough in implementing online learning across all levels of education -in the country (Anyorigya, 2020), these stakeholders ensured that the emergent transition from the traditional face-to-face (F2F) learning to online learning was possible. On January 15, 2021, some higher education institutions (HEIs) and schools resumed on-site learning because of the failure of the COVID-19-engineered online learning, inadequate technological infrastructure and an attempt to accommodate the "new normal" of living with the COVID-19 (Adarkwah, 2021a). The stakeholders in education were tasked with the solemn duty of ensuring adherence to the COVID-19 protocols while at the same time ensuring teaching and learning took place. Thus, both in 2020 during the COVID-19-inspired online learning and in the first quarter of 2021 during the temporal resumption of onsite learning, the stakeholders in education have helped reduced the rate of infection of the COVID-19 and have ensured the Sustainable Development Goal Four (SDG4) has been met. Quashie et al. (2021) in their study revealed that the COVID-19 exposure rate was higher among those with no formal education (26.2%) than those with tertiary education (13.1%). Thus, at the tertiary level, public education about the coronavirus was effective. Hence, people had good knowledge of COVID-19 symptoms, transmission routes, and preventive measures. Schools and health centers also campaigned for mass vaccination. The Ghana Education Service (GES) published a COVID-19 infection control policy for both day and boarding schools which also helped to ensure compliance with the health protocols (Quakyi et al., 2021). The authors added that school administrators used their discretion to address class size issues and mapped their schools to health facilities that provided extra guidance on specific COVID-19 response protocols. Data from the Ghana Health Service indicates that from March 2020 to June 2022, the distribution of COVID-19 cases in Ghana has reduced with a high recovery rate (163, 141 recoveries from 166,133 cases). Because of the high recovery rate (97.7%), the number of deaths (795) and fatality rate (0.8%) are low (Agbozo and Jahn, 2021). In this paper, we discuss some of the roles the four aforementioned key stakeholders assumed during the pandemic to aid Ghana in the COVID-19 recovery process and ensure the educational careers of students in the country were not in jeopardy. We make recommendations for policymakers in education on how to motivate these players to promote learning amid the COVID-19 crisis (see Table 1).

2. COVID-19 Impact on higher education

Pandemics are nothing new to the world. The SARS (severe acute respiratory syndrome) outbreak in China in 2002 and the MERS (Middle East respiratory syndrome coronavirus) in Saudi Arabia in 2012 were significant health concerns worldwide. But the emergent and novel nature of the COVID-19 adversely disrupted all sectors of society. Undoubtedly, worldwide education systems are among the sectors that experienced the full impact of the COVID-19 (Adarkwah, 2021a). The social distancing norms such as quarantining and lockdown policies as a result of the pandemic posed a great challenge for any F2F services. While many organizations were forced to shut down or reduce the rate of operation, school operations had to continue in accordance to meet the SDG 4 albeit in a changing landscape of new practices and processes (Dwivedi et al., 2020). Initially, the education of nearly 1.6 billion students was at risk when the COVID-19 forced school operations to halt temporarily worldwide (Lennox et al., 2021). There was a closure of F2F learning, academic libraries (Acheampong and Agyemang, 2021; Ifijeh and Yusuf, 2020), field research/physical data collection (Bhagat and Kim, 2020), in-person laboratories (Vasiliadou, 2020), professional development and assessment (Jena, 2020), and many aspects of school operations. Also, the pandemic significantly decreased international student mobility and the flow of international students in HEIs globally (Mok et al., 2020). The closure of schools had an impact on several stakeholders of education such as teachers, students, and families (Agormedah et al., 2020). Due to technological advancement and innovations, education moved fully online/blended in many educational institutions in the world. Most HEIs in the world engaged in online/-blended learning. However, those in developing countries faced unique challenges because they were accustomed to the traditional F2F instruction (Adarkwah, 2021b; Tadesse and Muluye, 2020). There were challenges associated with financing the online learning, the quality of education delivery, social interactions and how to keep students fully engaged in the learning process. For example, in Ghana, online learning was met with resistance in the pre-pandemic period and the emergent adoption was not successful due to difficulties such as frequent power outages, lack of data bundle, internet inaccessibility among others (Adarkwah, 2020). To this end, the Ghanaian government called for partial/temporal resumption of schools in the first quarter of 2021. Some of the public universities had to resume F2F learning but in a new manner in order to adhere to the COVID-19 health protocols.

Table 1
Emerged themes from the interviews.

Categories	Themes
School leaders	MT-YRE
	Orientation
	Provision of PPEs
Teachers	Health education and Reassurance
	Positive teacher-student relationships
	Classroom teaching/teacher support
Students	Adhering to rules
	Encouragement
Parents	Phone calls
	Financial support

3. Conceptualizing frontline workers

Frontline workers/heroes is a term that has been applied to workers who provided essential services during the COVID-19 pandemic/lockdown (Blau et al., 2021; Beames et al., 2021; Sumner and Kinsella, 2020). Frontline workers include the police, firefighters, health workers, social workers, suppliers, teachers and so on. However, the term has been commonly associated with health workers/professionals because most of the individuals who work in a frontline capacity (high-risk areas of infection) are in the health and care settings. Sumner and Kinsella (2020) mentions that these frontline workers have to navigate a lot of exceptional challenges such as dealing with circumstances that bring them into contact with the public, increased workload and pressure, and social isolation from their families. The COVID-19 pandemic had a physical and psychological impact on frontline workers, and in the process, many have died from the virus or committed suicide (WHO, 2020b). It was reported that 4 in 10 adults in the US experienced anxiety symptoms, 35% respondents in a study in China suffered from COVID-19 related psychological distress, and 700,000 deaths by suicide were recorded globally (Awan et al., 2022). In this paper, key stakeholders in education (school leaders, teachers, students, and parents of students) are the frontline workers being explored. A simple literature search on studies conducted on frontline workers in Ghana and beyond have largely excluded the aforementioned stakeholders in education. As a result, these stakeholders in education have been tagged as "forgotten" frontline workers in the context of the study. For example, Beames et al. (2021) position teachers as the forgotten frontliners of COVID-19 and call for a refocus of attention on teachers who worked relentlessly and in challenging working conditions. In Ghana as in many countries, the COVID-19 rapidly altered the educational workforce. School leaders, teachers, students, and parents were all expected to embrace new ways of working to ensure the continuity of education amid the psychological distress and the risk of contracting the coronavirus during the resumption of onsite learning. But policies to motivate essential workers have largely excluded these stakeholders in education as opposed to their counterparts in other sectors such as in the healthcare setting. Thus, in

both research and public policy making, the key stakeholders in education have been excluded. These stakeholders are "heroes" in promoting progressive education amid the ravaging pandemic but are faced with situational variables that have been undermined in research and in educational practice. Additionally, the decision to reopen school was taken at the national level without soliciting the views of these key players and local communities. The stakeholders are faced with unattended issues relating to infrastructure, teaching and learning materials, PPEs, psychological services, finance, and safety needs. The paper points to why it is essential to appreciate the role and address emerging issues of the frontline workers in education. Identifying these aforementioned frontline workers and their characteristics is essential for both policymakers and researchers in terms of distribution of PPEs, social insurance, vaccine research and development, and building the resilience of education systems across the globe against unforeseen crisis/disasters such as the COVID-19 pandemic (Blau et al., 2021).

4. Crisis management role of stakeholders in education

A crisis is an unfortunate and unexpected event that can negatively impact any organization. The emergent nature of the COVID-19 and its power to paralyze all sectors of an organization/society qualifies it to be a crisis. A comprehensive handling of a crisis is known as crisis management. The COVID-19 is a huge obstacle for the identified stakeholders of education. One of the most challenging tasks of the school stakeholders is their preparedness to handle crises in the future which is similar to the COVID-19 (Bhagat and Kim, 2020). A successful crisis management plan reveals the weaknesses in the education system and offers solutions on how to deal with the results of the crisis prior to its occurrence (Wang and Hutchins, 2010). School crisis management demands a collective effort of leaders, teachers, students, and parents.

School leaders were pushed to the limit as a result of the COVID-19 which has been upending the world (Harris, 2020). Harris mentions that leaders struggled to reconfigure ways in which they could run school operations outside the traditional way and reconnect with learners and ensure the well-being of many young people (Harris, 2020). Thus, the COVID-19 was a "perfect storm" that tested the crisis management capabilities of leaders (Bush, 2021). School leaders are leading their school facilities through online with reduced number of students whilst engaging communities, parents, and support groups. Although mistakes are made, the forward momentum and the determination to overcome the challenging situation is what is more important (Harris, 2020). In the midst of crisis, distributed, collaborative, and networked leadership has proven to be essential and the best way to operate.

School teachers have the responsibility of reassuring parents and students in the event of crisis (Daniel, 2020). In most cases, the provision of reassurance to alleviate anxieties in students is more important than trying to learn a new pedagogy or technology. Nonetheless, they have to make adjustments to ensure teaching and learning continue and regularly check the participation of students in the learning process. In this current pandemic, teachers adopted remote learning practices (Adarkwah 2021a; Adarkwah, 2021b; Saide and Sheng, 2021). At times, they have gone beyond the national curriculum and use their discretion in using a curriculum that is favorable and effective in the crisis situation. Also, they have to provide academic support to suit the learning styles of students because of individual differences among students.

Daniel (2020) mentions that during the COVID-19, some schools encouraged students to supply food hampers to vulnerable families or write letters to encourage the elderly residents in their respective care homes. Because crises like the COVID-19 have the capability to cause mental stress and increase social isolation; students need to form stronger ties with their friends and find ways (such as online communication) to stay in touch (McNamara, 2021). Additionally, one way students can help in the management of crisis is to adhere to school guidelines, work with their teachers, and fully participate in the new ways of learning. Ahmed et al. state that in HEIs, student representative bodies should engage with school leaders and teachers to serve the interests of the students they represent (Ahmed et al., 2020). The authors further added that students could be trained to offer psychiatric and social support to people in times of crisis.

Parents/families are central to education. Besides financial assistance they may provide for their child, they offer psychological support and work with school leaders/teachers to ensure the well-being of the student (Aguiar et al., 2021). Parental support results in intrinsically motivated learning and those with academic degrees are well-positioned to help their own children to successfully attain university degrees (Mishra, 2020). Amid the crisis, parents/caregivers had the sole duty to liaise with school leaders and teachers to ensure the health, safety, psychological well-being, and improved academic capability of their wards (Mackert et al., 2021). In the US, parents influenced the choice of foods in university students to promote their nutrition because of the COVID-19 (Powell et al., 2021).

5. The collaborative role of the stakeholders in mitigating the crisis during F2F learning

A key focus in this study is how the previously mentioned stakeholders joined forces to provide holistic education in light of the pandemic. Collaboratively, these stakeholders were responsible for lessening the disruption in the education sector during the physical resumption of schools amid the crisis (Bonell et al., 2022; Gopez, 2021; Li et al., 2021; Sharma and Joshi, 2021). While blended learning is positively viewed by many students during the COVID-19 pandemic, face-to-face learning is preferred because of the limitations of the blended learning (Mali and Lim, 2021). Students perceive they received a suboptimal learning experience when face-to-face learning was replaced by online learning or blended learning. It is also worth mentioning that students and teachers might feel some level of discomfort attending physical classes during the pandemic. Without an effective plan to reopen schools, the hazards that accompany the physical resumption might cause face-to-face attendance to drop drastically (Li et al., 2021; Weijer et al., 2021). Prioritizing students' and faculty safety during in-person learning is therefore essential to the education process.

The school-family relationship is necessary to motivate students and teachers, address their safety and psychological needs, and supply them with the requisite infrastructure/resources necessary to enhance education delivery. The stakeholders in education oversee adherence to the COVID-19 health protocols and foster individual practices such as the wearing of masks, measurement of temperature, maintenance of social distancing, promoting personal hygiene, vaccine intake, and self-regulated and lifelong learning (Sharma and Joshi, 2021). Li et al. (2021) mention that there is a need for a synergy between school-initiated "top-down" (school administration) approaches and individual-level "bottom-up" (personal behavior of teachers, students, and bottom-up administrative staff) approaches as no single method is efficacious in maintaining safety during school reopening. Thus, school administrators, teachers, students, and parents must cooperate in ending/reducing the impact of the COVID-19 on education by creating a safer school environment.

Some of the support systems include school administration and teachers' constant communication with students and parents through frequent messages and the provision of assessment techniques that limit physical contact (Mncube et al., 2021), regular cleansing of classrooms, adjusting the school calendar to maximize physical distancing, and the creation of smaller cohorts of students who eat, study, and perform activities together to reduce class sizes and the infection rate of the virus (Li et al., 2021). All the school preparedness/resumption plans can be discussed during the Parent-teacher association meetings (PTA) to solicit the views of each stakeholder. School administrators, teachers, and parents can work together to monitor the academic progress and safety needs of students, and in drafting a school-health program during

face-to-face instruction (Sharma and Joshi, 2021). The stakeholders have to work hand-in-hand to prevent non-essential visits to the school, monitoring of COVID-19 symptoms, test and retest for the virus, and implementation of quarantine measures for the sick. The school and family are responsible for promoting remote learning in the event that a student cannot attend school because of a medical condition (Weijer et al., 2021). In some countries, the decision to reopen schools and school operations has been decentralized to involve local communities and informed consent must be gained from parents before students can attend school physically (Ghate et al., 2021). In Ghana, the PTA plays a vital role in ensuring student safety and in promoting school interests. School-based interventions that involve parents promote safe F2F learning.

6. Method

6.1. Research context

The context of this study was two tertiary institutions (one public and one private) in the capital town of Ghana, Accra. The two institutions were purposively chosen because they were the earliest to begin the physical resumption of schools during the COVID-19 pandemic. The failure of online learning during the initial phase of the pandemic forced the hand of school administrators to reopen the schools. While most essential workers were advised to stay at home and lockdowns were implemented to curb the spread of the virus, school administrators, teachers, students, and other school employees were to physically attend their jobs to facilitate teaching and learning which was curtailed by the pandemic. The school leaders were to unite with the parents of students to provide a safer learning environment.

6.2. Study design

Prior studies have shown that is necessary to explore the lived experiences of students relating to their school leaders' initiatives, teacher relations, assistance and teaching, and parental support during the COVID-19 crisis through a phenomenological lens (Adams and van Manen, 2017; Bevan, 2014). The research utilized a phenomenological qualitative approach to explore the lived experiences of tertiary students who engaged in the temporal resumption of physical learning in higher education in Ghana during the first quarter of 2021. The phenomenological design allowed the researchers to construct the perspectives of the whole in-person learning experience with a major focus on the vital role of the four outlined key stakeholders in education in aiding Ghana to ensure education delivery and to recover from the pandemic.

6.3. Participants and data collection

Twenty in-depth, one-on-one, semi-structured interviews were conducted with the students which comprised twelve males and eight females. More than forty students were initially approached through research informants but the final sample ($n = 20$) of the study were those who expressed an interest in participating in the study. First, an interview date was scheduled with each of the respondents at the time of their convenience. They were informed about their rights and had the option to choose between audio or video interviews. Both authors were involved in conducting the interviews. All interviews (audio and video) were conducted using two online platforms (WhatsApp and Zoom). This was necessary because of the social distancing measures advocated to prevent person-to-person transmission of the virus. The interviews were conducted in English and lasted approximately 20 min for each participant. When saturation was reached (no new data was gathered from the interviews), the interviews were stopped.

6.4. Instrumentation

In constructing the interview guide, a lot of literature on onsite and online learning, COVID-19, crisis management, and school stakeholders' roles was consulted. The interview guide was semi-structured to allow the researcher to probe further and seek clarification while at the same time keeping the participants' minds on the subject matter (Bevan, 2014). The initial draft of the interview guide was assessed by a colleague for modifications and corrections. Questions were asked about school preparedness plan for the physical resumption of studies. Precisely, the questions elicited the views of participants on their experiences on campus during the school resumption and how they assessed the efforts of the stakeholders in education (school leaders, teachers, students, and parents) in ensuring Ghana recovers from the pandemic crisis.

6.5. Ethical considerations

Prior to the participation in the study, a letter of introduction detailing the objectives of the study was sent to each of the recruited participants. A written-informed consent was served to the participants to sign with an option to withdraw from the study at any stage of the research. Before each interview, participants were informed they were taped-recorded and could choose between audio or video interviews. Participants were given the opportunity to ask questions that needed further clarification. They were assured that neither they nor their host institution will incur a risk by taking part in the study. To avoid tracing back data to the participants of the study, pseudonyms were used.

6.6. Data analysis

During the thematic analysis stage, the recorded interviews of individual participants were replayed and matched to their respective texts to avoid transcription errors. The transcribed interviews were organized in the NVivo software to enhance the analysis. The emergent themes from the data were supported by quotes from the participants during the interview stage (Braun and Clarke, 2006).

6.7. Results

The strong partnership between school leaders, teachers, students, and parents was effective in continuing onsite school operations during the experimental face-to-face learning in the early months of 2021. Although the physical learning was not absolutely free from challenges, the collective efforts of the school stakeholders facilitated education delivery and adherence to the COVID-19 health protocols. The mitigation strategies ranged from a policy shift by school administrators to accommodate students in limited facilities, provision of PPEs; classroom teacher support and teachers forging good relationships with students to ensure their psychological wellbeing and welfare; peer encouragement among students and their adherence to institutional guidelines; and monetary and affectionate support from parents. The school-family relationship proved to be vital in the survival of education during unprecedented times.

6.8. School leaders

6.8.1. MT-YRE

The multi-track year-round education (MT-YRE) system which was initially (since 2017) experimented in second-cycle schools in the country was adopted to ensure continuity in education while at the same time ensuring adherence to the COVID-19 health protocol. The MT-YRE operates by dividing students into separate groups who rotates (a group stay at home at a time while the other stays in school before being replaced) during school breaks. This approach helps to prevent overcrowding and allow school leaders to serve a larger student body while

using the same school facility. In Ghana, this approach is known as the double-track system. Most of the participants agreed that the approach was an alternative solution to the halt in education. To throw more light on this, Audrey (not real name) stated that;

> "I would say that this method was new to us and had its own challenges but at the same time I think it was better to study in the lecture halls since the online learning was not helping some of us. Obviously, because we came in batches you would miss some of your mates but I think it was a good choice by the university leaders. It helped us to complete the semester."

Julius and Mary chose to focus on the health benefits of this approach. Speaking on the MT-YRE Julius mentioned that;

> "It reduced the number of students hence minimizing risk and spread of the virus."

Mary also added;

> "By avoiding congestion and overpopulation which could easily spread the virus."

It can be inferred from the participants that they were relieved that they could continue their education, particularly using the traditional approach (F2F learning) which they were accustomed to. Unlike the online learning which was implemented in the previous academic calendar, students had the chance to seek clarification on some educational content because of the MT-YRE which is able to increase contact hours between teachers and their students (Takyi et al., 2019).

6.8.2. Orientation

Crisis management requires briefing victims and key players involved in the crisis about the state of affairs and possible solutions. Acknowledge as the "new normal", school leaders organized an orientation for students on how to live with the threat of the COVID-19 while continuing their studies. According to the participants, the brief orientation at their schools gave them an overview of how the entire semester would look like. This helps the participants on how to embrace the academic duties and challenges of the semester. Cindy reflected that;

> "The orientation helped us condition our minds and assess our expectations of the semester's structure."

By way of summary, the orientation organized by the school leaders helped to calm nerves and students were well-braced to accomplish their learning tasks. By giving the outlook of the whole semester's learning process, students had a roadmap to plan the academic goals and also the part they had to play in ensuring their health safety.

6.8.3. Provision of PPEs

Undoubtedly, PPEs has become an essential commodity in this pandemic crisis. To ensure a successful school resumption that has the prevention of the COVID-19 at heart, it was appropriate for school leaders to distribute and advocate for the use of PPEs on school premises and in classrooms. Majority of the participants revealed that one of the first measures school leaders took was to ensure students and school staff had access to PPEs to combat the virus. Some of the PPEs distributed to the students included hand sanitisers and face masks. As expressed by Bruce;

> "We received masks and sanitisers. They also put Veronica Bucket and sanitisers at vantage points."

However, there were few of the participants who complained that they did not receive a face mask or hand sanitisers. Instead, their school provided handwashing apparatus and soap. This could be attributed to the limited funds which were available to school leaders due to the economic impact of the COVID-19.

6.9. Teachers

6.9.1. Health education and reassurance

According to an ample number of the participants (about 80%), teachers became the main advocates for preventive techniques regarding the COVID-19 in their schools. They disseminated health information regarding the COVID-19 and institution protocols that were needed to follow following the physical resumption of school. These health briefs were given during the orientation and other school assemblies. Sometimes teachers also gave pep health talks in classrooms before or after class. The participants also mentioned how teachers helped them in alleviating their anxiety levels through frequent reassurances. Sharon narrated that;

> "The teachers entreated us to wear our face masks often, wash our hands with soapy water, and ensure social distancing."

Linda expressed similar sentiments to Sharon. She remarked that;

> "They encouraged us to wear PPEs. They also ensured we wore our face masks always at the lecture halls."

Social distancing was also practiced in class because of their supervision.

One concern raised by Sharon is the fact that the face mask at times occluded the voice of their teachers. She pinpointed that;

> "We sometimes have difficulties in hearing them because of the nose mask."

Another participant, George, talked about reassurances provided by the teachers;

> "They told us that things will be better if we all follow the protocols. We were admonished not to be afraid and that if we stick to the measures put in place everything will be okay."

Daas et al. (2021) have revealed that the stringent health directives if followed reduce the rate of COVID-19 infection. In the midst of crisis, people are likely to be distressed, and reassurances help to promote calmness among affected groups and help them see the way forward in tackling the crisis. Thus, the reassurance provided by the teachers helped to ensure students were mentally stable to focus on their studies and to adhere to the health protocols.

6.9.2. Positive teacher-student relationships (TSR)

The nature of the relationship between teachers and students matter more than ever after the pandemic-induced school closures. This is because a positive TSR creates a conducive climate at school for effective teaching and learning. In the current study, almost all the participants agreed that the kind of relationship teachers forged with them was a contributing factor to their successful completion of the semester. According to Audrey;

> "Oh our relations with the teachers was a good one. They were friendlier after the pandemic. It made things simple."

Caleb also mentioned that;

> "We had good relationship with the teachers. They were approachable. We had an all-around learning experience. Personally, I was able to understand and pay attention in class."

It could be said that following the pandemic, teachers worked hard around the clock to ensure that the learning atmosphere was conducive for students to study. Positive TSR did not only motivate students and made them feel at ease to engage in the learning process, it gave teachers respect and helped them identify and tackle individual challenges of the students.

6.9.3. Classroom teaching/teacher support

It can be argued that teachers are paid to teach, but their job became

risky with the advent of the COVID-19. Participants of the study were therefore interrogated on how they valued the teaching experience and teacher support during the physical resumption of studies. Most of the students treasured the immense role the teachers played in order for them to achieve their educational goals. Julius expressed that;

> "I received support from some of the lecturers than the previous semester because we were fewer. I think most of the teachers deserve to be praised. I was afraid somewhere last year that I would not be able to finish my education soon. But they took us through the online learning and they are helping us now."

Richard also recounted how he was able to get feedback from teachers on some of the things he could not understand during his personal studies.

> "I was struggling with some of the topics being taught in class and those I studied myself. But I was able to get help from my economics teacher. His responses to my questions helped me to understand what was being taught."

It can be concluded based on the views of some of the participants that teachers were supportive in their teaching and were eager to address individual concerns. In this pandemic era, teachers have to incorporate a style of teaching that address the emotional, social and intellectual needs of students. They have to foster student engagement on the subject matter during classroom sessions to keep their minds from the threat of the virus.

6.10. Students

6.10.1. Adhering to rules

Information was solicited from students on how they perceived themselves as essential players in the COVID-19 recovery process. Unanimously, students pointed to the fact that their adherence to laid-down school protocols was key. The majority of the students opined that they all saw the gravity of the situation and were willing to play their role in reducing the rate of infection.

Audrey remarked that;

> "Right from orientation, I knew that to ensure I am not infected, I have to obey the guidelines from the faculty. We were all alert to the effect of the virus even before coming to school. So I would say that by obeying the school rules, we were able to protect ourselves and also the teachers."

6.10.2. Encouragement

There were some of the students who also responded that they helped calm the anxiety of the separate batch of students waiting to also resume the physical learning. They also provided feedback on the learning experience on campus to help their colleagues prepare for their session. Lydia expressed that;

> "Initially, we were all anxious. But after one or two weeks, everything became normal to us. When some of my friends in the other batch called for me to update them about school, I tried to tell them that learning was going on smoothly and there was no reported case on campus. I think most of my friends I talked to were not anxious anymore before coming for their session."

It can be said that students were also a key force in the education and recovery process through the minor roles they played. Healthy peer interactions promote socialization, collaboration, and fosters development of cognitive ability. Students in this study helped ensure their peers were emotionally stable to study.

6.11. Parents

6.11.1. Phone calls

Parents have keen interest on the well-being and academic progress of their children. It was revealed by a considerable amount of the participants that their parents kept in touch with them via phone calls to check their health status and how they were navigating their way through the learning process. Robert remarked that he felt the caring attitude of his parents even at school;

> "Yes, they phoned in several times and made me feel they really care. I was able to concentrate on my studies knowing that someone somewhere cares for you."

Victoria similarly mentioned that;

> "Yes, the phone calls helped in reassuring myself that everything was going to be okay. Contact with them made me feel less scared."

The above statements reiterate the essential roles parents play in the academic journey of students. Students who feel a sense of belonging at home often possess a clear mind to focus on their learning tasks.

Financial support

One of the core duties of parents/caregivers is to provide financial support for their wards. Prior studies have revealed that parental financial support is an essential factor in motivating students to study and ensuring their mental well-being (Benson-Egglenton, 2019; Nutsugbodo et al., 2022)). Students who have financial burdens are likely to encounter challenges in their studies. Most students in the study asserted that their parents ensured their financial needs were met. Gifty mentioned that;

> "I would say my parents sent me money for feeding and upkeep. They also paid for private tuition from some teachers."

Audrey expressed that;

> "They bought the necessary learning tools and gave me money to purchase data bundle. In my school we had a form of blended learning so the money helped me to get data for the online activities."

One participant, Beatrice, mentioned how the financial support from her parents helped ensure her health safety;

> "They provided me with the things I need so that I don't have to be taking things from others. Having my own things and PPEs helped me to social distance too."

What is obvious is that parents also played a role in the learning of students by ensuring their health and safety and monitoring their academic progress at school. Few of the participants also mentioned how parent-teacher collaboration was key in the whole educational process.

7. Discussion

School stakeholders experienced the pernicious effect of the COVID-19 pandemic and had to relentlessly join forces to promote education delivery amid challenging working conditions. It has been established in the study at a qualitative level that school leaders, teachers, students, and parents all helped in aiding Ghana to recover from the devastating effect of the pandemic crisis and also in realizing F2F learning. The results of the study indicate that each of the aforementioned stakeholders in education performed distinct roles according to their designation and capacity. Nonetheless, motivational policies for frontline workers have largely excluded those at the education sector who also had to physically attend to their jobs during the F2F learning in the early months of 2021. The decision to resume the F2F learning and how to ensure the safety of the school stakeholders, particularly students, were taken at the national level without soliciting the views of key players such as teachers, parents, and local communities. Despite the heroic efforts of these

stakeholders, to date, there has been a lack of public recognition by the Ghanaian government and research that focuses on addressing the situational variables that curtail smooth F2F learning post-pandemic. Bonney (2021) mentions that school stakeholders such as teachers are dissatisfied and intend to engage in a strike action. Recognizing the gallant efforts of school stakeholders and resolving the daunting challenges they faced will motivate them to be resilient in promoting education in times of crisis. The adoption of the MT-YRE by school leaders was a reasonable response to the failed online learning and the burgeoning COVID-19 pandemic. This is because the same lecture halls were used to provide education to all the two separate groups without incurring the cost of constructing new facilities to accommodate all students. At the same time, the WHO guidelines regarding social distancing and hygiene were adhered to. Additionally, on arrival on the school campus, school leaders ensured students were oriented and supplied with PPEs. During the school closures, it was reported that student connectedness with teachers, student well-being, and reducing student stress were crucial challenges facing school leaders (Chennamsetti, 2020). In the resumption of F2F learning although using the MT-YRE model, school leaders were able to increase contact hours between teachers and students, promote peer interactions, and reduce the anxiety levels among students. The learning community created was important in tackling some of the challenges mentioned earlier. In some schools, blended learning occurred on campus as well. The blended approach afforded students the luxury to access educational content on the internet thereby enhancing self-regulation in learning. Prior to the advent of the COVID-19, educational institutions in Ghana had no experience of a pandemic to build on. The alternative approach adopted by the school leaders were helpful in the short term as they made plans to permanently resume the traditional way of learning. A challenge to school leaders was the lack of adequate funds to manage school operations (Adarkwah, 2021a,b; Acheampong and Agyemang, 2021; Agormedah et al., 2020).

Teachers who had direct contact with students also provided health education on the COVID-19 to students and reassured and supported them in class. Health education has been underlined as one of the basic steps in managing an outbreak that threatens global health (Gray et al., 2020). This included handwashing techniques, wearing of face mask, coughing etiquette, and social distancing. As one of the participants revealed, the teachers helped create an environment that alleviated anxiety among students and enhanced their emotional stability through good relations with students. The positive teacher-student relationship in the universities has been underscored as a protective factor that helps students to adjust for better learning outcomes (Ye et al., 2021). According to Burns et al. (2020), well-being and health-promoting features should be a priority for universities, especially in this COVID-19 era. The teachers also offered academic support to struggling students and provided feedback in class. Such learning supports often leads to improved academic performance which is the goal of every student who aspires for further studies after graduation. Thus, teachers helped secured the educational future of the students which was threatened by the onset of the pandemic. Despite the significant impact on education, it is believed that university lecturers like their compatriots in the lower level of the education system remain dissatisfied and intend to embark on a strike action (Bonney, 2021).

As evidenced by the findings of the study, both students and parents also played their unique roles in the education and COVID-19 recovery process. Before the physical school resumption, many educated parents worked from home and as a result, assisted their children in their learning (UNESCO, 2022). With student now distant from home, the assistance of parents/caregivers were still felt by many students. The school and family worked together to prevent transmission through transportation to and from school and also in-school transmission in an effort to help reboot the Ghanaian economy. Collective efforts are required to ensure continuity in education and safeguard Ghana against experiencing another wave of the virus. Ghana has not experienced a major impact of the virus as many western countries have since the inception of the virus. Data from the WHO COVID-19 dashboard reveals a decline in the number of COVID-19 cases and deaths in Ghana from January 2020 to June 2022.

In view of the preceding discussion which has highlighted the collaborative role the identified key stakeholders played since the onsite learning, it is recommended that policymakers in education address concerns relating to their safety, inclusion in school preparedness plans, and motivational packages. According to Wakui et al. (2021), these stakeholders, particularly teachers experienced anxiety about their own safety and the welfare of families after the reopening of schools during the COVID-19 pandemic. The researchers call for the need to tackle issues about slander and discrimination that comes with contracting the virus by these stakeholders because of the physical resumption of schools. The coordinated efforts of the Ministry of Education (MoE) and the Ghana Education Service (GES) in providing motivational packages, adequate ventilation in schools, PPEs, medical management, screening and testing services, vaccine centers in schools, adequate infrastructure, teaching and learning resources, and assisting lower socio-economic households in any way necessary will suffice to give the stakeholders the boost to promote smooth education delivery and aid the nation in the COVID-19 recovery process.

8. Conclusion

The study sought to identify some of the key roles some stakeholders in education in Ghana played in facilitating recovery from the COVID-19 and promoting education delivery. In doing so, these stakeholders were defined as frontline workers in higher education. Analysis of the interview data suggests that all of these stakeholders were a driving force for behavioral change in the education process and as such also helped in preventing a possible infection from the COVID-19 through their behavioral practices. Notably, it was revealed that school leaders had to subscribe to a new approach (MT-YRE) suitable for the COVID-19-induced situation, to curtail the spread of infections and make F2F learning possible. Institutions also made sure of the availability of PPEs for students and faculty. One of the first measures undertaken was also to orient students about the schools' preparedness plan to combat the pandemic crisis and to ensure a successful completion of course contents for the academic semester.

Teachers were apt to provide COVID-19 health education to students, forge good and positive relationships with them, and offer them psychological support to distressed students. Accordingly, students also adhered to the institutional protocols spelt to them during orientation and effectively engaged in the learning process. Students also became a beacon of hope to their peers who were at home by allaying their anxiety on the nature of the COVID-19 prompted MT-YRE approach. By way of monitoring, parents phoned their children, provided financial assistance to students, and at times collaborated with teachers to ensure the health and safety of students. All this points to the crisis management role these stakeholders in education. In the education sector, these stakeholders can be viewed as national heroes. Nonetheless, as previously mentioned, motivational incentives for civic workers were mainly targeted at health workers while educators, particularly teachers were neglected (Asamani et al., 2022). In the COVID-19 literature accessible to the academic community, little has been done to document the significant role the stakeholders of education have played in aiding in the COVID-19 recovery process (Beames et al., 2021). There is a need for policymakers in the education sector to recognize the heroic efforts of these stakeholders through favorable motivational policies. Researchers should ensure inclusivity in terms of highlighting the frugal needs of the stakeholders and the massive role they played in facilitating teaching and learning during the pandemic.

9. Recommendations

The current pandemic serves as an unprecedented experience for educators and policymakers in the education sector to build on in the event of another pandemic. One lesson that can be learnt from the ongoing crisis is that significant players in education should be well-prepared beforehand against future disasters or crises. There should be a crisis management plan for school authorities to follow and funds for crisis management. What was identified in literature is that school leaders still need funds for the effective functioning of school operations. The government of Ghana should make funds available for the public universities for school management. During the COVID-19-inspired online learning, students complained about the lack of incentives for bandwidth or WIFI for the online learning (Adarkwah, 2021a; Adarkwah, 2020). One way to alleviate this is through the established COVID-19 fund. Teachers still lament their working conditions and the lack of recognition in the teaching profession (Bonney, 2021). Teacher unions should work with relevant bodies and the government to ensure that the welfare of teachers is catered for. In this F2F learning, PPEs play a key role. Students from low-income households might find it difficult to purchase PPEs with little money specifically for living costs. There should be a constant supply of PPEs for both teachers and students from central government. PPEs, sanitizers, and washing bowls should also be made available for parents/relatives who visit students at school. It is also high time that parents to be included in decision-making and the educational process that has an effect on the future of their children. As such, it is advocated that parent-teacher collaboration should be promoted in higher education institutions in the country. To address the little recognition of the efforts of these stakeholders in the education sector in literature, it is recommended that future researchers focus on this area of research and explore the experiences, challenges, and roles of each of the stakeholders in an in-depth manner. Future studies should also focus on how to establish a crisis-management framework for universities that is based on context.

10. Limitations

In the current study, data were collected only from students. The researchers could not gain access to key school leaders who were at the helm of education affairs due to time constraints. All accounts presented in this paper are based on student report without factoring in the reports of the other stakeholders. In future studies, researchers should solicit information from each of the key stakeholders in education.

Author statement

The first author was responsible for conceptualizing and designing the study. The first author and second author both worked together to develop the introduction of the study. The second author was responsible for data collection and transcribing of interviews. The first author performed the thematic analysis of the gathered data. Both authors worked together to come up with the final draft of the study. The revision of the study was carried out by the first author. All the authors approved the final revised manuscript.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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