Early Childhood Teachers' Role in Ensuring a Safe Environment During Teaching in Early Childhood Centers During Covid-19: A Phenomenological Study in Effutu Municipality

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ABSTRACT

The study explored the role early childhood teachers played in ensuring a safe environment during the Covid-19 in the Effutu Municipality. A phenomenological study design was employed for the study. The study adopted purposive sampling using a homogeneous sampling technique to select 15 kindergarten teachers within Ghana's Effutu Municipality. A semi-structured interview guide was used for the collection of data. The data were analyzed using thematic analysis. The study revealed that the Covid-19 pandemic had varying impacts on teachers in early care centres. Positive and negative effects were identified, which are consistent with previous research. The study also discovered that teachers in early childhood centres played a significant role in maintaining a safe environment during the Covid-19 pandemic. The study thus recommends to the Effutu Municipality Ghana Education Directorate to provide training and support to enhance teachers' digital competencies through professional development programmes and online training courses. Secondly, policy guidelines should be established to prioritize health and safety measures within early childhood centres, including social distancing, regular cleaning, and adequate provision of cleaning materials. Lastly, there should be efforts to encourage parental engagement by providing information, resources, and support to parents, and promoting resilience and adaptability among teachers through training and professional development programs.

keywords: COVID-19, safe environment, early childhood centres, early childhood teachers

1. Introduction

1.1. Background

The Covid-19 pandemic, often described as a "necessary evil," has left no aspect of life untouched, impacting various sectors including businesses, healthcare, religious activities, and education (Nantwi & Boateng, 2020; Ebrahim et al., 2021; Aurino et al., 2020). It all began when the new coronavirus, SARS-CoV-2, emerged in late December 2019 in Wuhun, China (World Health Organisation [WHO], 2020). In just months, WHO (2020) declared it a global pandemic due to its rapid transmission. Covid-19 spreads primarily through contact with infected individuals or contaminated surfaces, mainly through coughing, sneezing, or releasing saliva and mucus into the air or onto hands (Ghana Health Service [GHS], 2020). This contagious nature has led to hospitalizations, intensive care admissions, and sadly, numerous fatalities, particularly among older individuals and those with underlying health conditions.

Chimolo et al. (2020) reported that the Covid-19 pandemic claimed the lives of 63,000 Americans, leaving many survivors in dire economic straits, at risk of losing their homes, and struggling to provide for their families. Additionally, school closures resulting from the pandemic led to 55 million American children missing out on their education. To adapt, many schools transitioned from traditional in-person instruction to online learning, prioritizing the safety of teachers and students. While the pandemic's impact was widespread, Africa, despite receiving cases of Covid-19 in all its countries by December 2021, recorded significantly fewer cases and deaths compared to North America, Europe, South America, and Asia (Gilbert et al., 2020).

On March 12, 2020, Ghana reported its first two confirmed cases of Covid-19, both individuals who had returned from Turkey and Norway. By May 15, 2020, Ghana had seen 5,530 confirmed cases, with 4,832 active cases, 674 recoveries, and 24 deaths, affecting thirteen out of its sixteen regions (GHS, 2020). By December 2020, the number of confirmed cases had risen to 54,000, with 323 deaths, making Ghana one of the countries with the highest case count in Sub-Saharan Africa, trailing behind South Africa, Ethiopia, Kenya, and Nigeria (UNICEF-Ghana, 2021). Despite a lower rate of infections among children, school closures were deemed necessary as part of the broader strategy to implement social distancing measures and prevent overwhelming healthcare systems. The pandemic disrupted all aspects of the educational system, with early childhood education experiencing significant impacts.

In the pre-pandemic days in Ghana, families with young children had access to various educational and care options related to in-person instruction (Jones et al., 2020). However, after the adversaries of the pandemic on teaching and learning and the closure of educational institutions, there was a need for online teaching and learning. This was not an easy task because many teachers found themselves ill-prepared to address the issues related to online instruction, addressing inequities in internet access among students, and dealing with food insecurity within their households (Gross & Opalka, 2020; Hamilton et al., 2020; Malkus et al., 2020). Persistently, educators went to great lengths to ensure the effective delivery of quality education and had to rapidly adapt their teaching plans, styles, and assessment methods. Likewise, students faced the challenge of adjusting to the "new normal" in their educational environment. Supporting this assertion is a multi-country study conducted in Australia, Bangladesh, Norway, Singapore, and India to investigate how the pandemic reshaped early childhood educators' identities and teaching environments. Gomes et al. (2021) espoused that the pandemic changed the natural flow of activities. It was identified that there was a rapid shift to online education, requiring teachers to quickly acquire new digital competencies and adapt their teaching methods to facilitate children's learning through video, messaging apps, and emailed activities. Classroom dynamics significantly changed as social distancing measures and individual play replaced collaborative learning. The study underscored teachers' remarkable resilience and adaptability in response to the crisis. Furthermore, in a study focusing on teachers in the United States, Lai et al. (2021) found that teachers felt responsible for student safety during emergencies but often lacked preparedness. They highlighted the need for more training on emergency procedures and access to essential resources like first-aid kits and communication tools.

Crawford et al. (2021) also documented the commendable efforts of early childhood teachers in the United States to balance online and in-person education, modify instruction for social distancing, implement rigorous cleaning protocols, and sustain learner engagement amidst these challenges. Despite limited preparation and support, teachers demonstrated significant creativity and commitment to maintaining the quality of education. Similarly, studies from China highlighted the struggles of teachers in motivating young children in remote learning, compounded by a lack of training in online pedagogy (Dong et al., 2020; Zhang et al., 2020).

Summarizing international research, Jalongo (2021) affirmed that the pandemic threatened the well-being of early childhood teachers worldwide, exacerbating existing inequities and causing disruptions in pedagogy and the teaching profession. Nevertheless, the author argued that this crisis also presented opportunities to renew global commitments to early education.

In addition to parents who dedicate substantial time to their children, teachers also have the opportunity to spend a significant amount of time with children in the school setting. Hence, to provide a smooth educational experience, teachers and caregivers assumed the responsibility of preventing the spread of Covid-19 among early childhood learners, creating a safe learning environment. In this context, teachers played a pivotal role in helping learners navigate the uncertainties of this ever-changing environment. The current study investigates the various specific roles of early childhood teachers in ensuring a safe environment during the Covid-19 pandemic in the Effutu Municipality.

1.2. Statement of the Problem

Teachers are essential in creating supportive, organized classroom environments that encourage children to demonstrate competency according to De Kruif, McWilliam, Ridley & Wakley,2000). Children can perform intellectually and socially at greater levels in positive classroom situations where they feel physically and mentally protected (Frenzel, Pekrun, & Goetz, 2007; Sandilos, Rimm, & Cohen, 2017). The unusual setting brought about by the Covid-19 pandemic has enabled teachers to lead in new ways and innovate (Kruse, Hackmann, & Lindle 2020). Teachers had to make several adaptations during the Covid-19 pandemic to satisfy the learning needs of the learners at the early childhood centres and to ensure that the Covid-19 protocols or measures were followed in the early childhood centres in order to prevent learners from catching the Covid-19 disease.

The rapid rise in Covid-19 cases around the world provided a significant issue for those involved in education because it directly altered the functional duties of teachers, legislators, and curriculum developers. Covid-19 was given limited time by school systems to develop strategies to train teachers in optimal practices (Lamb, 2021). Upon the school's resumptions after school closures, the researcher observed that, in the majority of cases, the Covid-19 pandemic forced early childhood teachers to act without much warning and with little time to prepare. Curriculum activities were modified or condensed, lesson plans adapted, and teaching methods turned on their heads.

While people across the world take precautions to protect themselves, their families, and their communities from Covid-19, it is also critical that children continue to study in an environment that is accepting, courteous, inclusive, and supportive to everyone United Nations Educational Scientific and Cultural Organizations [UNESCO], 2020). The Covid-19 pandemic has brought into focus the integral relationship between the health and education of children, and the deep inequities in both. Amid this, early childhood teachers had a responsibility to provide a safe and healthy environment for learners within their centres.

Some informal conversations between the researcher and the early childhood coordinator in the Effutu Municipality revealed that early childhood teachers in the Municipality were forced to adjust themselves and their environment to address the learning needs of the learners. However, some substantial research exists on Covid-19 and early childhood education. For example, a study conducted in Kenya by Ng'ang'a (2021) looked at children learning in the midst of Covid-19. Some of the key findings are that Covid-19 has spurred more than half of the education innovations, almost nine out of ten Kenyans are aware of interventions in education that worked during Covid-19 and learning solutions are loaded on mobile phones. Ebrahim, Martin, and Excel (2021) conducted a study to investigate early childhood teachers'

and managers' lived experiences of the Covid-19 pandemic in South Africa during the lockdown. Their study indicated that Covid-19 disruption resulted in entrenched inequities in early childhood service provision and early learning chances. Sayed et al. (2021) also conducted a study on teacher support, preparedness, and resilience during times of crises and uncertainty in South Africa. The key findings of Sayed et al. (2021) revealed that in policymaking during times of crisis and disruption, teachers request relevant and meaningful professional development and psychosocial support for teachers during Covid-19. From the researcher's readings, it appears all the studies that have been conducted under this have been conducted outside Ghana and no study has been in the Effutu Municipality. It appears as though many studies have been conducted on the Covid-19 pandemic concerning teachers' experiences. Little or no empirical study has been conducted to ascertain early childhood teachers' role in ensuring a safe environment during the Covid-19 pandemic in Ghana. The understanding of the ways in which early childhood educators contributed to mitigating the transmission of the virus, fostering a harmonious and conducive classroom atmosphere, and safeguarding the educational opportunities of young learners amidst the challenges posed by the Covid-19 pandemic in some early childhood settings in Ghana holds significant importance. The lack of comprehensive understanding regarding this phenomenon has prompted the initiation of this research endeavour, aiming to contribute to the current body of literature. The study aims to provide valuable insights for educators on how to effectively establish a secure atmosphere in the event of a comparable or more severe circumstance.

1.3. Purpose of the Study

This study sought to explore the role early childhood teachers played in ensuring a safe environment during the Covid-19 in the Effutu Municipality.

1.4. Research Questions

1. What are early childhood teachers' perspectives on the impact of the Covid-19 pandemic on their teaching practices?
2. What responsibility did early childhood teachers assume in maintaining a safe environment in early childhood centres amid the Covid-19 pandemic?

1.5. Theoretical Framework

The study is underpinned by Peter's (2020) Viral modernity theory. The viral modernity theory postulates that viruses impact human lives and revolutionize our way of living. The theory further states that the virus's impact on humans banished panic and better medical knowledge and surveillance of viruses in related infectious diseases invoke fear, making people hyper and of pandemic threats to which they have been previously ignorant. Advancing the argument Petersa, Jandri and Mclea (2022) further noted that large pandemics such as Covid-19 have always been significant in influencing society and cultures. Inferring from this, the pandemic and pandemics reform our normal way of living subjecting us to live in a new normal. Teachers have had to adapt rapidly to new health and safety protocols, shifting from traditional teaching methods to virtual or hybrid formats. Contextualizing this, the Covid-19 pandemic has significantly disrupted the existing structures and practices in early childhood education. Practitioners within the enterprise adopt or adhere to new practices by performing some roles to meet the pandemic protocol demand. This ensured a safe and healthy learning environment for the learners. Given this, the study used Peter's Viral Modernity theory to examine early childhood teachers' role in ensuring a safe environment during the Covid-19 pandemic in the Effutu Municipality.

2. Methodology

2.1. Research Design

In this study, the researchers used a descriptive phenomenological design. This design is rooted in the qualitative approach**.** A phenomenological design according to Creswell (2014) describes a common meaning for several individuals of their lived experiences of their lived experiences of a concept or a phenomenon. Moustakas (1994) maintained that descriptive phenomenology focuses on bracketing the researcher's biases or setting aside the researcher's experiences and taking a fresh perspective toward the phenomenon under examination. In a phenomenological design, the researcher brings down individual experiences, describes them, and shows their universal essence. In this study, the researchers used a descriptive phenomenological design as a plan in a qualitative research design to explore the lived experiences of early childhood teachers regarding the roles they played in ensuring a safe environment during Covid-19 in the Effutu Municipality.

2.2. Population, Sample and Sampling Technique

The target population for this study was 181 early childhood teachers within the Effutu Municipality. The sample size consisted of 124 kindergarten teachers. A sample size of 15 was chosen for the study, following Creswell's (2013) recommendation of sample selection for a qualitative study. A sample size of 15 participants was large enough to sufficiently describe the experiences of early childhood teachers during the Covid-19 pandemic and address the research.

Questions at hand. A large sample size could risk having repetitive data (Vasileiou, Barnett, Thorpe, & Young, 2018). The primary objective of the researchers was to achieve data saturation, a point at which no new insights or perspectives emerged from the data. We achieved data saturation after the 15th respondent, indicating that additional participants would not yield additional valuable information. A homogeneous sampling technique was used to select the participants. In homogeneous sampling, people or sites are included in a study because they share a common trait or qualities (Creswell, 2014). The researchers established the attributes of interest and looked for people who exhibited those traits in the study using this technique (Kusi, 2012). The researcher utilizes a homogeneous sampling strategy to sample trained teachers who have experience with Covid-19 between the years 2020 and 2021 when schools first opened.

2.3. Data Collection Instrument

The study employed a semi-structured interview guide as a data collection instrument. The semi-structured interview guide was chosen because it is more adaptable and allows interviewees to express their thoughts, feelings, and experiences more freely than a structured interview guide. When appropriate, an interviewer has the chance to go deeper into certain topics of interest and responses provided by respondents (Kuranchie, 2016). One of the objectives of a semi-structured interview is to allow the researcher to probe for clarity and in-depth information from the interviewee's responses. The instrument had two sections, namely (A and B). Section 'A' asked questions on the early childhood teachers' perspective of the impact of the Covid-19 pandemic on their teaching practices. Section 'B' asked questions on the roles they played in maintaining a safe environment in early childhood centres amid the COVID-19 pandemic.

2.4. Data Analysis Procedure

The researchers utilized thematic analysis as their chosen approach for data analysis, drawing inspiration from the approach described by Braun and Clarke in their 2006 publication. Thematic content analysis involves the systematic identification, examination, and reporting of recurring patterns within a dataset, allowing for a comprehensive exploration and description of the collected information.

After conducting each interview, the researchers transcribed the conversations verbatim, ensuring consistency by cross-referencing the audio recordings with the transcriptions. This meticulous process involved multiple rounds of review to ensure an accurate understanding and interpretation of the interview content. This immersive approach enabled the researchers to deeply engage with the data and gain a thorough understanding of its significance.

During the data collection phase, the researchers applied codes to capture key statements and related opinions aligned with the study's objectives. These codes remained consistent throughout the data collection process and formed the basis for a structured coding system. The assigned words or phrases facilitated the categorization of participants' responses, which were then organized into codes corresponding to the research questions posed. These codes were subsequently synthesized into overarching themes using the Targuette software.

Throughout the analysis process, the emergent themes were subject to critical review, with the researchers also referencing field notes provided by the participants to enrich their understanding and support the identified themes. These coding themes were subsequently categorized into distinct reports, following the classification approach outlined by Kumar (2011). The comparison of themes took into account their uniqueness, frequency, commonalities, and differences.

The interviews in this study were carried out to address two specific research questions. During the analysis process, the researchers identified a total of six distinct themes that emerged in response to these two questions. As the study progressed, the themes underwent refinement and modification to ensure their accuracy and alignment with the collected data. Ultimately, these refined themes served as the foundation for contextually and practically relevant recommendations, contributing to a comprehensive understanding of the experiences of early childhood centre teachers during the Covid-19 pandemic. Table 1 provides an overview of these themes.

Table 1.
Themes and Sub-themes for the Study

Research Questions	Themes
Research question 1 What are early childhood teachers' perspectives on the impact of the Covid-19 pandemic on their teaching practices?	● Views on Covid-19 ● Covid-19 and the learning environment
Research question 2 What responsibility did early childhood teachers assume in maintaining a safe environment in early childhood centres amid the Covid-19 pandemic?	● Ensuring social distancing ● Cleaning and disinfecting learning materials ● Encouraging sick children to stay home ● Protecting self and others

3. Results and Data Analysis

3.1. Bio Data of Respondents

The researchers interviewed 15 participants to conduct this study. The participants were aged between 23 and 53 years. All the participants were female early childhood teachers. No male teacher was identified at the early childhood classroom. This indicated that the study's findings were influenced by the views of female early childhood teachers. Since no comparison was made with respect to male and female teachers, the outcome did not affect the study since the questions were not gender specific. The personal information also showed that the participants who were interviewed indicated various ranks. Five participants were ranked Superintendent I, seven of the participants were ranked as Superintendent II, and three of the participants were ranked as Senior Superintendent II. Their academic and professional qualifications were Diploma and Degree in Early Childhood Education and Basic Education, while their length of service spanned from 4-27 years. For the purposes of anonymity and confidentiality, the identities of the participants are undisclosed. Instead, information attributed to them was identified with pseudonyms (ECTr) which were given to them during the interview session.

3.2. Research Question One: Early Childhood Teachers' Perspectives on the Impact of the Covid-19 Pandemic on Their Teaching Practices

The first research question explores early childhood teachers' perspectives on the impact of COVID-19 on their teaching practices. The study identified that Covid-19 had an impact on the teaching practices at the early childhood centres which affected the learners. These are presented under the following themes:

- Views on Covid-19
- Covid-19 and the learning environment

3.2.1. Views on Covid-19

The first theme derived from the research question is the views early childhood teachers have on the Covid-19 pandemic. Teachers at the early childhood centres indicated that the Covid-19 pandemic has positively and negatively impacted early childhood education. For example, a teacher expressed that:

> *I will say that Covid 19 has both negative and positive sides. I will talk about the negative side first. The negative side brought in a situation where some jobs and companies have to lay off some workers or employees due to the crowdedness in the workplace. Teachers lost their jobs, they couldn't get paid well, especially the private schools, because the children weren't in school, they were not paying school fees, hence teachers could not be paid. But on the positive side, we learnt so many things. We learnt how to use technology from the teacher. The children care for their hygiene as well, which was not so before the Covid-19 pandemic* (ECTr 1).

Another teacher added:

> *Covid-19 was a virus that we all got worried about when we heard that Covid-19 was in Ghana. We were all worried because of how these kids are when they are playing, they don't know there is anything like that. They were not thinking about things like how it was going to worry them and the staff* (ECTr 03).

Correspondingly, ECTr 11 mentioned that:

> *When Covid-19 came, I learnt about it and the preventive measures that we have to take when we are in school for our learners. So, we make sure when children are in school, they are in their nose masks, wash their hands regularly and use their hand sanitisers to rub their hands* (ECTr 11).

ECTr 5 also confirmed that:

> *Covid 19 wasn't a good name for the country because it didn't bring anything to us. It slowed the economy, and everything wasn't growing, a lot of people lost their jobs and we the teachers had to go home and we the private teachers, were not paid like the government teachers who were home and were paid. we had to do online things so that we could get a small income. we went on total lockdown and we were not aware of these things, we just shut everything down and we had to stay home* (ECTr 05).

The interview data indicates that early childhood teachers are aware of both the good and bad effects that the Covid-19 pandemic has had on early childhood education. Losses of employment, financial distress, a downturn in the economy, and teacher pay gaps between public and private schools are some of the adverse consequences. On the other hand, the pandemic promoted the use of technology in the classroom and raised awareness of good hygiene among children in early childhood settings. This data underlines the need for comprehensive plans to address the problems and take advantage of the possibilities that have arisen during this time by highlighting the complex and multidimensional nature of the pandemic's effects on the early childhood education sector.

3.2.2. Covid-19 and the Learning Environment

The second theme from research question one is the Covid-19 and the learning environment. The teachers interviewed revealed that the pandemic affected the learning environment of early childhood centres. A participant mentioned that:

> *The COVID-19 pandemic has changed the learning environment in that the way we used to do things before the Covid-19 has changed. Due to Covid-19 we've taken hygiene in the school environment very seriously, because of how one can easily contract the pandemic. The Covid-19 safety protocols have been part of our everyday routine. We have to ensure that these learners our safe in the school* (ECTr 15).

Also, ECTr 02 noted that:

> *I will say yes it was a challenge for us because we didn't know how to fix it and it also changed our timetable, and how we were coming to school. At first, we were going for a long vacation and because of the covid, we are not going for the long vacation again* (ECTr 02).

In addition, ECTr 04 also stated that:

> *Yes, because the way of doing things changed. We were having big groups but due to the covid-19 we had to divide each group for it to be two to have a smaller group so, we now had six groups. And then the way of arranging the class itself because of social distancing we need to separate them for air to move in the class freely. And then the hugging and the touching also reduced. So, it changed the learning environment and even the duration in school was reduced* (ECTr 04).

In support of ECTr 04, ECTr 05 reviewed that:

> *Yes, it really affected the learning environment because at first, we were together teaching playfully and doing everything at ease but because of the pandemic everything was shattered, and we had to start everything afresh* (ECTr 05).

ECTr 07 also articulated that:

> *It has really affected the learning environment because initially we had Fridays for PE where we could have gone out to play but we used that opportunity to create other fun activities where these children especially those who don't always like writing and classroom work will also have a benefit of doing that, but they can't play with their colleagues because they are being restricted. You are always in the classroom because you are preventing yourself from getting the covid 19. In fact, for a long time, we weren't going to assemblies, we went to the class, and we sang whatever we wanted to sing, prayed and then we started the lesson. You will only see your friend's face when it is closing time. there was no break time because break time means we all go out and play together, we are supposed to take care of ourselves so we can't even go out and play* (ECTr 07).

The interview data from the early childhood educators revealed that the Covid-19 pandemic has had a profound impact on the learning environment within early childhood centres. Changes in hygiene practices, modifications to the schedule and classroom arrangements, reduced physical contact, and restricted activities have transformed the educational experience for both teachers and learners. However, it is important to note that the pandemic has also presented opportunities for educators to explore new teaching methods and technologies, potentially leading to positive changes in the long run.

3.3. Research Question Two: Responsibilities Assumed by Early Childhood Teachers in Maintaining a Safe Environment in Early Childhood Centres Amid the Covid-19 Pandemic

The second research question examined the responsibility of the early childhood teacher in maintaining a safe environment during the Covid-19 pandemic in early childhood centres. The study identified several responsibilities of the early childhood teacher in ensuring a safe environment during the Covid-19 pandemic. These are presented under the following themes:

- Ensuring social distancing
- Cleaning and disinfecting learning materials
- Encouraging sick children to stay home
- Protecting self and others

3.3.1. Ensuring Social Distancing

The first theme that emerged in relation to the second research question was the role early childhood teachers played in ensuring social distancing. The respondents in this study considered social distancing as a necessary intervention to ensure safety hence establishing it among the learners. For example, ECTr 04 emphasized this view, citing her personal example:

> *My classroom is very small, but I managed it. Most of the activities in the classroom were brought outside so that we could distance ourselves from one another. So that children will not have close contact with one another. So, I had most of our classrooms in the open space* (ECTr 04).

Another participant further noted that:

> *For social distancing usually, I will tell my children they should spread out their hands. Ensuring the social distancing I was telling my children that should spread out their hands. They should make sure their hands don't touch anybody. So, with that, we kept the distance* (ECTr 06).

One respondent also pointed out that:

> *Yes, I quite remember one boy telling me that teacher I want to play with my friend, and I told him that because of the pandemic if you play with your friend and you get in touch with him, and the person is having the disease. He will also be affected by it. So, I placed items in the classroom for them to play with. Sometimes I take off all the chairs and tables. And then you will see them sitting in one corner doing their own thing* (ECTr 10).

Another participant indicated that:

> *Children and social distancing…hmm…. We role played on the social distancing. As their teacher, I told them not to be holding their friends. You need to guide them. So, you will tell them they will forget but I practiced with them every day. The children themselves were reporting to me that some of the children were touching their friends. So, they themselves were doing the security for us. In the beginning, it was very difficult for us, but they came to the realization that there is something going on, and that is why we are telling them what they should do, for example, social distancing* (ECTr 02).

Similarly, an early childhood teacher shared her role by stating:

> *In fact, ensuring social distancing was challenging but I was encouraging them, motivating them, and talking to them not to play together and also get in touch with their friends. I have to do more of the talking. If I don't hug you, if I don't shake your hand, it doesn't mean I don't like you. Is the situation we find ourselves in. Covid has made us follow protocol. it's not forever. And that was because people were dying, and they had seen some of them. So, they were all witnesses to the situation. When you switch on the TV you will see Covid people dying. When you are in the house you hear someone has gotten this, so the situation made us tell them that is not permanent. Is a situation that has come and the disease if we follow the protocols will go. So, we encourage them* (ECTr 07).

ECTr 01 also added that:

> *For social distancing usually, I will tell my children they should spread out their hands. Ensuring the social distancing I was telling my kids sorry my children should spread out their hands. They should make sure their hands don't touch anybody. So, with that, we kept the distance* (ECTr 01).

A participant mentioned that though it was challenging establishing social distancing among the learners, they did their best to ensure safety: She responded this way:

> *because of this pandemic, a lot of activities couldn't go on in the school, like assemblies and other things because you might try to social distance them but still these children will end up coming to the classroom, I tried my best, if you are sitting on a table, I just reduced it to 3 so there will be spaces in between them. If you are moving to a friend's place to go and play, you just have to talk to the children and tell them that you can't go to this place, it's like you are being limited. Due to the pandemic, we were limited to a lot of things, you couldn't even play, you couldn't talk too much, you couldn't even yawn freely, it really was something but with my learners, I tried* (ECTr 15).

Another participant remarked this way:

> *It wasn't easy because you can't tell a child who is two years old not to get close to his friends but the only thing that I did was that I told them they shouldn't put their hands on their friend's neck. And they were sitting apart from each other. The problem was*

that we just couldn't just tell them that they shouldn't play with them. sometimes when they get close, I get there and put them apart so that they don't get too close so it's not like we were preventing them from playing but I just like telling them that they can play with their friend but not too much and not too long. (ECTr 03).

Whereas some respondents agreed to have played roles and shared some of the roles they played in establishing social distancing, hence ensuring safety; other early childhood teachers believed that establishing social distancing among children is impossible, hence they could not maintain social distancing among the children. A participant mentioned that:

Social distancing was difficult at the KG level because we were sitting in circles. I mean round tables, that is how we sit at the KG and our number too didn't allow us to observe the social distancing, but we tried to deal with the number that came each day. So, for my class there are sixty-two children but every day and its attendance. So, I dealt with the number when they came to school. So, maybe a day I have sixty children or maybe fifty-five children, I will make sure maybe I have ten on a table so that they will not be too crowded. So that is how I did the social distancing, but it wasn't as effective as it was supposed to be. The tables were not far from each other, but they sat on a round table, not observing the social distancing to one another. We tried but it wasn't successful. it was God who saved us. (ECTr 08).

Affirming the comment made by ECTr 14, indicated that:

The only thing I could say is that the children should not get too close to another child. But you know these children, they will be doing their own things. The moment I say it, you will see them coming together so it was very difficult establishing social distancing. The classroom is also too small, and we didn't have enough space to ensure they were sitting far from each other (ECTr 14).

The comments from the respondents indicated that they were maintaining social distancing among learners in early childhood centres in the Effutu Municipality. This contributed to reducing opportunities for Covid-19 disease transmission. In their events and daily routines, large group activities were reduced to slow down the outbreak in order to reduce the chance of infection among the children.

3.3.2. Cleaning and Disinfecting the Learning Environment

The second theme that emerged in relation to the second research question was the role early childhood teachers played in cleaning and disinfecting the learning environment. The respondents in this study understood that the virus that causes Covid-19 can land on surfaces and stay for several hours. They also understood the possibility for people to become infected if they touch those surfaces and then touch their nose, mouth, or eyes hence there was the need to clean and disinfect the learning environment to ensure safety. A respondent expressed the role she played this way:

Yes, as for this school, every morning because the class is very small is not spacious. During early morning activities because of how KG teaching is done. Normally the chairs are arranged for circle time. And before we do that you sweep the class of course and you dust the chairs before you arrange it. After that, you have to dust the tables too and arrange tabletop activities. And of course, you have arranged your centres, the learning corners and dusted all those things and cleaned all the toys and everything. You don't do it with a sanitiser, but you make sure the dust and other maybe water and soap or something you clean it. Make sure the place is fine. If there are books that are not arranged, you arrange them well and clean the surfaces (ECTr 01).

In the same vein, another early childhood teacher remarked that:

> *I was scrubbing the place with Dettol, but it was not every day. Before school reopened, I used the Dettol to scrub and then every two weeks or a month or as needed because the place is not cemented. The place is very rough, so if you want to scrub there's no water in the school compound. We go to other neighbouring places for water. That's why I was saying that we used the Dettol as and when I needed it. And the disinfectant, we were disinfecting their pencils and then the sanitiser too we were using it. We used sanitiser to disinfect the chairs and other things. But the scrubbing of the floor wasn't done regularly but for their washrooms yes. We used the sanitiser. For their veronica bucket, we use sanitiser to wash and clean some of these things. But not the floor, the floor is very rough and if you want to use water unless you use about plenty of buckets of water* (ECTr 13).

Another teacher mentioned that:

> *Yes, I do put sanitiser and any of the disinfectants. I usually use Dettol. So once in a while, I will just sprinkle and then you clean, because you know they are kids and then they pick germs easily. And I ensure washing of hands also. In fact, one thing I also did was encourage them to get local spices. Yes told them to tell their mothers to put just one or two. I don't know whether it is acceptable or not. Looking at it I know locally they are antibiotics* (ECTr 07).

ECTr 10 stated that:

> *Yes, I did. A mixture of parazone and Dettol was given. They will clean their tables, and wash their hands after eating, they will do the same thing. After school when we finish sweeping the classroom, we all come together to mop the class* (ECTr 10).

Another respondent noted that:

> *So, the materials that are concrete materials like their learning blocks, bottle tops and even their pencils were always disinfected because I know how Covid-19 is and how it spreads. I make sure that they clean the objects they bring to school. Also, I assisted them in cleaning their tables and the floor* (ECTr 03).

ECTr 02 narrated the following:

> *Yes, they did that regularly, especially on Fridays when we were going on the weekend. Before we leave the school compound, they will come and fumigate the school, the classroom, and the compound, then we leave, then on Monday we come and do a little cleanup before the children come in* (ECTr 02).

She further noted that:

> *For the learners, they can't always do things themselves, so I had to always be doing all of these things for them, but I did it frequently, and immediately they finished using the objects. I made sure that we cleaned everything and put it back where we took it, and we did the same thing before giving it to them. we were doing every day on a regular basis* (ECTr 02).

The responses of the interviewees suggest that they employed ways of cleaning and disinfecting the learning environment. Cleaning with products containing soap or detergent reduces germs on surfaces by removing contaminants and decreases the risk of infection from surfaces. This role, they believe, helped to ensure a safe environment for learning amidst covid 19 pandemic.

3.3.3. Encouraging Sick Children to Stay Home

The third theme derived from the second research question was that early childhood teachers prioritized safety, accordingly, encouraging children to stay home when they were sick without knowing the cause of the sickness. For example, one of the respondents remarked that:

> *I discourage sick children from coming to school. Because when they come to school sick, they will not be active in class. They will not be active and happy because I will try and isolate them. They will sit somewhere else. And then I will educate the parents to let their kids stay at home. So, they didn't even try to come* (ECTr 04).

ECTr 10 stated that:

> *Depending on the sickness, I did encourage some of them because they have difficulty. They wanted to come to school because of how they would be meeting teachers and other friends, but the situation didn't allow them. So, encouraged them that they should stay at home. So, they should improve their health before they come to school. Because looking at a child suffering to breathe, when he or she wants to come but we encourage them don't worry, I will still bring your homework. Your mother will come for your homework for you to do at home. So, I encourage the very sick ones to stay at home. If it's not severe, you don't have a temperature high, I encourage you to come. Because some of them decide to stay in their house intentionally, nothing is wrong with them, but they will just say they won't come to school. So, such a child you have to encourage them* (ECTr 10).

Another respondent noted that:

> *Oh yeah, because there is no need for you to come to school, especially when you are sick. There is a need for you to stay to recover fully before you come to school. So, Perfect punctuality was discouraged. So perfect awards were stopped. I explained to them that this is the situation we are facing, and they understood it. So, there was nothing like the best punctuality* (ECTr 07).

In support of ECTr 07, ECTr 05 also said that:
> *In the sense that prior to Covid-19teachers were giving children awards. Like when a child comes to school regularly, you give the awards that well done Kojo, and even in the classroom if a child is able to answer questions an award. If not even award an appraisal or something. So, if a child is sick the child wants to come to school because he or she knows that when she comes to school madam will give me an award because I am coming to school* (ECTr 05).

Data from respondents showed that they urged the learners to stay at home when ill or showed symptoms of illness. Other teachers mentioned that they call the parents of the learners who arrive at school sick and ask them to pick them up. Teachers also mentioned that they informed parents of the new disease, known as Covid-19, and its transmission methods. Therefore, they advised learners to stay at home if they are ill.

3.3.4. Protecting Self and Others

The responses of the interviewees emphasised that they played a considerable amount of role in protecting themselves and their learners during the Covid-19 pandemic. The teachers claimed that during the Covid-19 pandemic, they had to take precautions for both them and the students. One of the participants said:

> *In the school environment whenever I am coming to school, I have to put on my face masks because I am handling children. So, I have a face mask and whenever I get to*

the compound, I make sure that you wash your hands with soap and water and sanitize them before I even let you get into the classroom. I always have to check your temperature before you enter the school and when you are going home, I will just take your temperature before you leave the school. Doing all these, I believe am protecting myself and the children from contracting the Covid-19 pandemic (ECTr 02).

Contributing to the roles early childhood teachers played in protecting themselves and the children during the Covid-19 pandemic, ECTr 08 indicated that:

So, the Covid-19 because we are all aware, every morning I tell them about the disease, the new era that we are in that is Covid-19. So, I made sure all my colleagues put on their nose masks and then sanitized their hands and we weren't coming closer. But because of Covid-19we usually wave and wash our hands regularly and we put on our nose masks. So, when I am teaching, I wear my nose mask, and the learners too. One of the early morning activities was to check whether they were wearing their nose mask and also wash their hands then use their hand sanitizer to sanitize their hands. It was done in the morning, in the afternoon which is break and closing time. So, when we are doing work, I go around and give them the sanitiser for them to sanitize their hand. Since I did this together with other colleague teachers, we are all safe and no one has contracted the virus (ECTr 08).

Affirming the roles early childhood teachers played, ECTr 05 said that:

We were all advised on how the virus is, and how dangerous that virus is so we asked the children to be protected by wearing their nose mask. We were provided with some from the Education office, so I gave it out to learners, and we had veronica buckets that we always have water in with their tissue and their sanitisers. So, after break, I make sure every learner washes their hands and sanitizes. Teachers were also given advice (ECTr 05).

Another teacher also added:

Initially, when Covid-19 came to Ghana, schools were closed down. And when school schools resumed, we protected ourselves by abiding by the safety protocols which are wearing nose masks, washing our hands, and sanitizing our hands (ECTr 09).

Correspondingly, ECTr 11 mentioned that:

I was protecting others, and I ensured the learners also followed the safety protocols. I also told the learners to watch television about the Covid-19. I also told them to listen to news on Covid-19. This has helped in not recording Covid-19 cases in our school (ECTr 11).

The views expressed by the early childhood teachers indicate that they played a very important role in ensuring that the children entrusted under their care are protected against the Covid1-19 pandemic. Again, it is evident that they were concerned with their own safety as well as other stakeholders who visit their school hence putting in measures to ensure safety.

4. Discussion of Results

4.1. Early Childhood Teachers' Perspectives on the Impact of Covid-19 Pandemic on Their Teaching Practices

According to the findings of this study, the Covid-19 pandemic was perceived differently by teachers employed in early care centres during that period. The study identified both positive

and negative effects of the pandemic on early childhood education, aligning with the findings of Karakaya, Adiguzel, Ununcu, Cimeen, and Yilmaz (2021), who also reported on the dual impact of the Covid-19 pandemic. All aspects of early childhood education underwent significant changes as a consequence of the Covid-19 pandemic, as observed by some teachers. In terms of the benefits associated with Covid-19, teachers highlighted the transformative effect of the program on their practices within early childhood centres, wherein new approaches were incorporated. This observation aligns with the findings of Jia et al. (2022), who similarly reported on teachers' adaptability to novel practices.

Furthermore, the study revealed that teachers in early care centres embraced various new habits to mitigate the risk of contracting the Covid-19 virus. Consequently, the pandemic necessitated heightened awareness among teachers regarding the cleanliness of the school environment and the personal hygiene of learners. The study also uncovered that the Covid-19 pandemic engendered a highly stringent environment within early childhood centres, as teachers exerted substantial effort to ensure compliance with Covid-19 safety measures.

The findings further revealed that early childhood centre teachers need to enhance their understanding of utilizing technology as a teaching tool. Yilmaz and Tokez (2022), employing a quantitative approach, demonstrated in their study that the pandemic has improved teachers' competencies in utilizing technology as a teaching tool. Early childhood educators expressed that the detrimental effects of Covid-19 on early childhood education have been disruptive. Teachers at this level asserted that due to the extended period students spent at home— approximately nine months—they encountered difficulties in retaining previously acquired knowledge. Moreover, Engzell, Arun, and Mark (2021) also highlighted in their findings that learning loss occurred as a consequence of the Covid-19 pandemic. Consequently, teachers had to exert additional efforts to educate and provide remedial instruction for their young students in early childhood centres. The adoption of new safety precautions proved to be a challenge for students at the early development centre.

4.2. Responsibilities Early Childhood Teachers Assumed in Maintaining a Safe Classroom Environment

The study additionally uncovered that teachers in early childhood centres assumed a significant responsibility in maintaining a safe environment during the Covid-19 pandemic. The study identified that teachers adhered to the guidelines provided by the World Health Organization (WHO) and the Ghana Health Service (GHS) to ensure a safe environment, despite the relatively low incidence of Covid-19 among children. Furthermore, the respondents reported that they took necessary precautions to ensure the safety of the students by implementing social distancing measures. The data from this study indicated that practising social distancing became an integral part of teachers' daily routines.

The findings revealed that teachers actively discouraged the formation of large groups during classroom activities. However, implementing social distancing measures proved challenging during the Covid-19 pandemic due to the prior physical contact that students were accustomed to. These findings support the research conducted by Sheila et al. (2021), who also observed that teachers encountered difficulties in restricting physical interactions among students in schools during the Covid-19 pandemic. Another important role played by teachers during the Covid-19 pandemic was the cleaning and disinfection of the early childhood environment.

The findings also indicated that as part of teachers ensuring safety in the school environment, they made sure they cleaned and disinfected the school environment. By doing this, respondents noted that they wash the teaching materials of the learners with soap and after that, they sanitize them with sanitizer. Respondents said they do this after every lesson when the

objects are been used. Respondents in the study said they disinfect the classroom with a disinfectant every morning before learners come to school and after school. The findings lend ample support to Poala et al. (2021), who found that early childhood centres dedicated time before and after learners arrive to clean surfaces and disinfect materials, and teachers were assigned to dedicate cleaning to the centres.

In similar evidence, the study indicated teachers encourage learners to stay home when they are sick. In addition, they called parents to tell them to let their wards stay at home when they are sick. Findings from this study indicated teachers encouraged learners to stay home because they did not know about the child's sickness. The findings of this present study bear resemblance to the findings of the Department of Health, of Soudien, Reddy and Harvey (2022) who found that school heads and administrators encouraged learners to stay home when they are sick. Teachers changed their procedures in order to comply with the pandemic protocol and Covid-19. Teachers who adopted the new procedures incorporated the Covid-19 guidelines into their daily lessons so that students may practice them. As an illustration, they might wear a nasal mask or wash and sanitize their hands daily. The early childhood centres used this as part of their routine procedures.

4.3. Key Findings

The following findings emerged from the study:

- The study reveals that the Covid-19 pandemic had varying impacts on teachers in early care centres. Positive and negative effects were identified, consistent with previous research. The pandemic brought significant changes to all aspects of early childhood education, leading to transformative practices and the incorporation of new approaches by teachers. Teachers also embraced new habits to mitigate the risk of Covid-19 transmission, resulting in heightened awareness of cleanliness and personal hygiene. Stringent safety measures were enforced within early childhood centres. The findings emphasize the need for teachers to enhance their understanding of using technology as a teaching tool, as the pandemic improved their competencies in this area. The detrimental effects of the pandemic on early childhood education were observed, with students facing difficulties in retaining knowledge due to extended periods spent at home. Learning loss occurred, requiring teachers to provide additional efforts in educating and offering remedial instruction. The adoption of new safety precautions posed a challenge for students at early development centres.
- The study discovered that teachers in early childhood centres played a significant role in maintaining a safe environment during the Covid-19 pandemic. They adhered to guidelines provided by the World Health Organization (WHO) and the Ghana Health Service (GHS), even though the incidence of Covid-19 among children was relatively low. Teachers implemented social distancing measures and actively discouraged the formation of large groups during classroom activities. However, implementing these measures proved challenging due to the prior physical contact that students were accustomed to. Teachers also took responsibility for cleaning and disinfecting the school environment, including teaching materials, surfaces, and materials used by students. They encouraged learners to stay home when they were sick and communicated with parents to ensure their children stayed home when necessary. Teachers changed their procedures to comply with Covid-19 protocols and incorporated the guidelines into their daily lessons.

5. Conclusion

The researcher after carefully studying the major findings of the role of early childhood teachers in ensuring a safe environment during the Covid-19 pandemic in the Effutu Municipality, draws to the conclusion that the Covid-19 pandemic has had both positive and negative effects on early childhood education; it has had some implications for the learning environment, which has affected some teaching practices; the study found that some teaching methods were used while others weren't because they didn't comply with Covid-19 safety measures. Maintaining a safe environment in the early childhood classroom during the Covid-19 pandemic, early childhood educators were crucial. The roles that were played in ensuring safety included making sure that the learners wore their nose masks throughout the school day, encouraging learners to regularly wash and sanitize their hands, encouraging and practising social distancing, cleaning, and disinfecting the indoor and outdoor learning environments, and advising learners to stay home when they were sick. These measures put in place by the early childhood teachers reduced the risk of the learners contracting the Covid-19 pandemic.

6. Implication for Policy and Practice

Based on the findings of the study on the impacts of the Covid-19 pandemic on teachers in early care centres in Ghana, several implications for policy and practice can be considered. These implications are aimed at enhancing early childhood education and ensuring the safety and well-being of learners. Here are some key implications:

Training and Support for Teachers: The findings highlight the need for teachers to enhance their understanding of using technology as a teaching tool. Ghana Education Service should put measures in place to provide training and support for teachers to improve their digital competencies. This can be achieved through professional development programs, workshops, or online training courses.

Health and Safety Measures: Teachers played a crucial role in maintaining a safe environment during the pandemic. Ministry of Education and Ghana Education Service should design policy guidelines to prioritize the health and safety of learners and teachers. This includes implementing and enforcing stringent safety measures within early childhood centres, such as social distancing, regular cleaning, and disinfection protocols. Adequate provision of cleaning materials and resources should be ensured.

Parental Engagement: The study highlights the importance of communication between teachers and parents. Ghana Education Service and the Ministry of Education should encourage and facilitate parental engagement in their children's education, especially during periods of remote learning. Providing parents with relevant information, resources, and support can help them contribute effectively to their child's learning and well-being.

Resilience and Adaptability: The pandemic has demonstrated the need for teachers to be resilient and adaptable in the face of challenges. Policy measures by the Ministry of Education to promote the development of resilience and adaptive skills in teachers through training and professional development programs. This can help them respond effectively to future disruptions and changes in the educational landscape.

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