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# Evolving trends of distance learning for basic education in Namibia: A parental perspective during Covid-19 lockdown

## ABSTRACT

Ingenious technology-driven education has become prevalent during the COVID-19 pandemic in schools. This article solicits pre-primary to Grade 12 learners' parents'/ guardians' views and experiences of distance learning in Namibia during the COVID-19 lockdown. The study employs a mixed-methods research design to gather and analyse data. The analysis of the qualitative data revealed the following main themes: 1) Barriers to distance learning, and 2) Suggestions to overcome these challenges. The sub-themes were: 1) Communication, 2) Teaching and learning 3) Economic challenges, and 4) Materials and equipment. The results of a quantitative analysis revealed that 73,7% of the participating parents' children had not received any form of education, and 23,7% affirmed that their children had received some education. 53% of the parents whose children had received an education were very dissatisfied. Therefore, the participating parents' expectations of e-learning were not positively associated with the provision thereof. Lack of digital literacy prevented teachers from actively engaging with learners in digital communities.

***Keywords***: distance learning, COVID-19 lockdown, teaching and learning, basic education

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## 1. Introduction

The Ministry of Basic Education, Arts, and Culture (MoEAC) of Namibia provides education to learners from pre-primary to Grade 12. The COVID-19 pandemic has disrupted the traditional face-to-face teaching and learning in Namibia in particular and the whole world in general. In response to this crisis, the use of distance learning across sectors has become imperative since the onset of the pandemic. The term 'distance learning' replaces the former, commonly used term, 'online learning' (Picciano 2018; Seaman et al. 2018). Distance learning refers to an approach to learning in which teachers and learners are physically separated. Various communication technologies are used to facilitate the teaching and learning process in this system.

The COVID-19 pandemic was first identified in Wuhan, the capital of China's Hubei province in December 2019. Since then, this pandemic has spread globally. As a result, schools, universities, and other educational institutions worldwide were forced to close. In response to school closures, UNESCO (2020) recommended the use of distance learning programmes and open educational applications and platforms that schools and teachers can use to reach learners remotely and limit the disruption of education.

As the use of technology has become more prevalent in households, shifting from traditional face-to-face teaching in basic education classrooms has become a necessity during the COVID-19 lockdown. When technology is integrated into the classroom, learners can engage themselves in interactive tasks with a wider range of information and knowledge during their learning (Barakabitze 2019). Technology in distance learning/education involves the use of computers, IPads, smartphones, or any other equipment that provides access to the Internet.

In response to the COVID-19 pandemic, the MoEAC of Namibia has, in its Circular, ED 8/2020, lowered the minimum promotion requirements for learners from Grade 1-9 and urged schools to generate recovery plans to continue face-to-face teaching. Learners adapt faster than instructors when using new digital tools and emerging technologies (Greenhow & Askari 2017). When Namibian teachers engaged learners on digital learning platforms such as Google Classroom and WhatsApp in distance education during lockdown, the learners showed complex understanding and excitement during participation. However, not all teachers and administrators shared this excitement and welcomed innovative teaching practices. Such an attitude implies that schools and teachers remain static and tend to replicate instructional practices that fail to take advantage of both technology and the experiences that learners bring with them from their out-of-school lives (Husbey 2013).

While many teachers prefer traditional teaching, technology and the possibilities of digital learning are rapidly changing the trends of how education functions worldwide. How teachers currently teach requires an adjustment because technology has proven

to affect both learner engagement and motivation (Chiong, Ree, Takeuchi & Erickson 2012). Distance learning requires student collaboration, professional communication skills, a 'deep understanding of digital environments', co-creation of knowledge within e-learning environments with other students to develop deeper understanding while using learning management systems with other applications, and technology to enrich learning outcomes (Becker et al. 2017: 2). The purpose of this article is to solicit pre-primary to Grade 12 learners' parents'/guardians' views and experiences of distance learning in Namibia during the COVID-19 lockdown. Therefore, the question is, are parents' expectations of e-learning positively associated with the provision of distance learning during the COVID-19 lockdown? In the next section, distance education is outlined.

## 2. Distance education and technology

An online learning system has the potential to fast-track student learning, while an online learning environment allows for the interaction and engagement of learners. For Rogers (2009), distance education is a learning system that separates the teacher and student geographically or technologically. Similarly, Bilings et al. (2002) defined distance education as an educational environment where the educators are separated from learners by time and/or space.

Through online or distance learning, learners can interact directly with the learning content that they encounter in multiple digital formats (video, audio, document, etc.). Most research studies indicate that distance education uses one or more technologies to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor synchronously or asynchronously (Allen et al. 2018). This implies that distance learning takes place via web instruction. Distance learning may take a hybrid shape which means that learning activities are a combination of face-to-face and virtual learning. Hybrid learning is a pedagogical approach that combines face-to-face instruction with computer-mediated instruction (O'Byrne & Pytash 2015). Hybrid learning is also relevant within a blended learning context. "Blended learning designates the range of possibilities presented by combining Internet and digital media with established classroom forms that require the physical co-presence of teacher and students" (Friesen 2012, p.1). On the other hand, virtualization is a process wherein the basic social needs of an individual are met via computers and mobile devices. It generates a completely new phenomenon – cyber socialization (Gaol & Hutagalung 2017). Schools in Namibia were given the option to continue using various teaching and learning formats during different phases of COVID-19. Homeschooling or learning from home was a commonly used option worldwide through virtual learning. Learners around the world have remained at home and could participate in the teaching and learning process during scheduled virtual lesson sessions.

A popular social media messaging application, WhatsApp, was used to communicate with and distribute learning materials to parents for learners during the lockdown in Namibia. Social media is a term that broadly implies a grouping of technological systems or apps related to social collaboration and social online communities (Joosten 2012; Tess 2013). Several other sites such as Skype, Zoom, FaceTime, Telegram, etc. were also used. The benefits of these applications include being able to message a group of people at the same time and using Wi-Fi rather than messaging data. Messaging apps are widely used by smartphone users, but can be installed on a desktop as well. In the advent of these social networking sites, video streaming, blogging, instant messaging, and many more technologies have entered today's primary classroom revolution. The teacher's role remains important when learning goes distant, as he/she continues to act as a mentor (Hernández-García, González González 2015). Many primary school teachers worldwide prefer to use traditional teaching methods rather than technology (Altan & Karalar 2018). Teachers believe that student learning needs are better supported during face-to-face learning experiences. Teachers' beliefs are attributed to a lack of communication technology, and formal electronic methods to connect with learners on an official platform such as Google Classroom, Moodle, or Blackboard in schools in developing countries, such as Namibia.

## 3. Theoretical orientation

Online collaboration and community building are important theoretical principles for the design of distance learning programmes. The 'communities of practice theory' of Wrenger (1998) provides a framework for understanding how the social relations and cultural capital of digital practitioners are structured. The idea of 'communities of practice', depicts the interactions of digital practitioners who share common goals of the practice and knowledge about how to achieve teaching and learning goals (Poon 2020). Learning takes place once a person is inside a learning community and in collaboration with other members of a social group. While mastering the goals of collective practice, learners continue to learn in their interaction with other competent members of the specific community (Yanow 2004). Distance learning prompts self-regulated learning which refers to the ability of a learner to prepare for his/her learning, take the necessary steps to learn, manage and evaluate the learning and provide self-feedback and judgment, while simultaneously maintaining a high level of motivation. There are benefits for participants in online communities in terms of learning and personal development (Garrison & Akyol 2013; McLoughlin & Lee 2010). Establishing an efficient online community requires a set of rules, habits, strong ties, and interaction among participants, to achieve common goals (Wenger 1998). Web-based learning environments lend themselves to self-regulated learning approaches (eg. Inquiry-based learning, problem-based learning). New learning tasks and concepts impose numerous demands on learners (Narciss, Proske & Koerndle 2007). In the context of situated learning (Lave & Wenger 1991), learning in professional communities is considered as a dynamic and social participation process, collaborative activities, working artifacts,

routines, stories, or common language (Roth & Lee 2006). Communities of practice and developing systems are continually evolving. According to Wenger (1998), a learning community functions in a circular process which might show less activity, restructures, and redirects itself on particular features or dies out. When teachers use the Internet and digital technologies, online learning communities may impact teaching and learning from a social and participatory perspective. There is a need for primary and secondary school teachers to gain digital knowledge that could foster a collaborative work culture among themselves and their learners in online communities.

## 4. Distance teaching and learning in Namibia

Google Classroom, Google Forms, WhatsApp and Telegram were core online apps supporting continuous communication among learning communities within the Namibia basic education context during COVID-19 lockdown. Google Forms is a web-based app used to create forms for data collection purposes. For teaching and learning, Google Forms is a suitable app for the collection of student assessment data. Teachers can use Google Forms to create quizzes, tests, or activities for assessment purposes. Access to a hyperlink enables participation. Google Forms provides a platform to type answers, view results, and submit quizzes, tests, activities, or surveys. However, social media apps such as WhatsApp recommended for teaching and learning do not make it possible for the teacher to assess learners. These online learning environments aim at providing a learning process that is more comprehensive than traditional approaches and the environments require communication and technology to help new generations to learn (Mokhtar 2016). Communication between students and instructors should occur promptly. Teachers can set the cut-off date for participation, opt for a graphic display of results, monitor participation rate, and keep a record of learners' progress when using both Google Classroom and Google Forms. Since assignments are often used as formative assessments, these assignments contribute to a student's progress in the specific course/subject area (Lee et al. 2011). The provision of teaching and learning, using information technology requires careful planning and institutional policy support.

## 5. Barriers to accessing the Internet

Institutional technological capabilities (infrastructure, bandwidth, technical support) are necessary to support electronically mediated distance learning programmes (Naveed et al. 2017; Sayed & Baker 2014b). In their study, Mashile, Fynn, and Matoane (2020) reveal that the network infrastructure in South Africa is not equitably developed and broadband access is highly expensive. Namibia faces similar barriers in terms of the provision of distance learning and access to the Internet. Furthermore, these authors reveal that distance learning is constrained and institutions need to weigh several factors to determine the mode of delivery and the kind of learner support provided. According

to Birch and Burnett (2009), institutions find barriers related to strategic planning, the absence of institutional policies, and the cost of implementing online educational systems. Furthermore, obstacles such as resistance to change, failure to fulfill expectations, lack of professional development, personal culture, inconsistency between the technology and pedagogical beliefs, among others (Veletsianos, Kimmons & French 2013), can also impede the process.

Access to the Internet in Namibia is available for those who can afford it, and is limited, with the best coverage in major urban areas only. Distance learning requires both the teacher and the learner to have a sufficient level of computer proficiency. Lack of computer proficiency may hamper learning. In 'communities of practice' every child has a mentor or teacher. This role could be shared among the child's parent/guardian during homeschooling and the teacher. Failure to provide mentorship in online communities also impedes learning.

## 6. Methodology

The study employed a mixed-methods research design to collect and analyse data. Creswell (2009) states that mixed methods research is a design (or methodology) in which the researcher collects, analyses, and mixes (integrates or connects) both quantitative and qualitative data in a single study or a multiphase program of inquiry. The question of this study is the following: were parents' expectations of e-learning positively associated with the provision of distance learning during the COVID-19 lockdown?

Purposive sampling was used to collect the data. Purposive sampling techniques involve the selection of certain cases 'based on a specific purpose rather than randomly' (Tashakkori & Teddlie 2003a: 713). Purposive sampling leads to a greater depth of information from a smaller number of carefully selected cases. Participants were recruited via email and social media groups and asked to respond to an online survey. Participant eligibility included 1) Being a parent/guardian, 2) Having a child/children enrolled for Pre-primary to Grade 12 during 2020.

The questions in the survey were designed to find out how parents/guardians supported e-learning and how they expected their children's education to continue amid challenging times. Participation was voluntary and the online nature of the questionnaire wherein a hyperlink (https://forms.gle/KSR63JNeZCzZvZ1N6) was used to complete the questions, provided confidentiality.

The survey allowed for the use of standardized questions and was structured to be used only once per participant online. Merriam (2009) indicates that online data collection widens the scope of data. Even though huge amounts of data were collected, not all were relevant or used for this study. An online population of (N=3967) completed the survey which included one 'yes/no' question, a Likert scale item, and a section for the

demographic profile of the respondents. More specifically, the instrument comprised a total of 10 questions. Question 1-5 aimed to collect baseline data about demographic variables such as age, gender, geographic region, type of school, and the satisfaction rate of the participants with the efforts to continue teaching and learning during the COVID-19 lockdown. Question 6-10 solicited information about experiences and barriers relating to distance education, and suggestions on how to overcome these barriers Despite having received voluminous amounts of qualitative data, descriptive themes that cut across the data were identified. I coded the participants' responses using the Grounded Theory process of open and then axial codes (see Cobin & Strauss 2007) to identify emergent themes or particular cases of interest. Ultimately, the data were sorted under the following main themes: **barriers to distant learning** and **suggestions to overcome challenges**. The sub-themes deriving from the two main themes were 1) *teaching and learning*, 2) *communication*, 3) *economic challenges,* and 4) *materials and equipment*. Since qualitative data analysis is, in its initial coding phase, inherently inductive, the analysis of the results supported by sources inside the data in the form of participant quotes, as well as sources outside the data, grounded in the relevant literature is presented below. A descriptive analysis of the data is presented first.

## 7. Presentation and discussions of data

### *Demographic information*

According to the results of the online survey, the pre-primary and Grade 12 parents were mainly 40+ and 35-39 years old respectively.

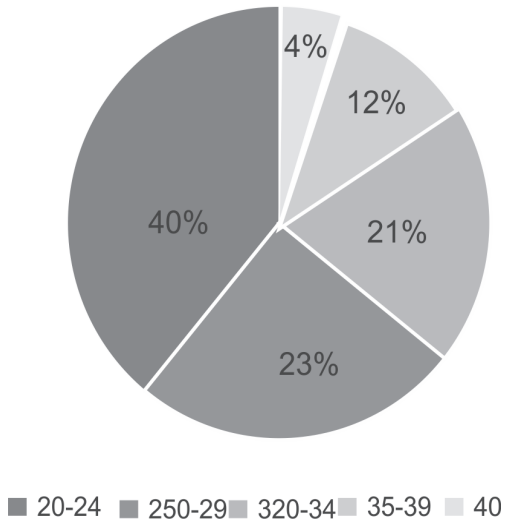


***Figure 1: Age***

Figure 1 presents the participants' age groups. 39.9% were 40 years old and above, 23% were 35-39years old, 21% were 30-34 years old, 11.7% were 25-29 years old and 4.1% were 20-24 years old.

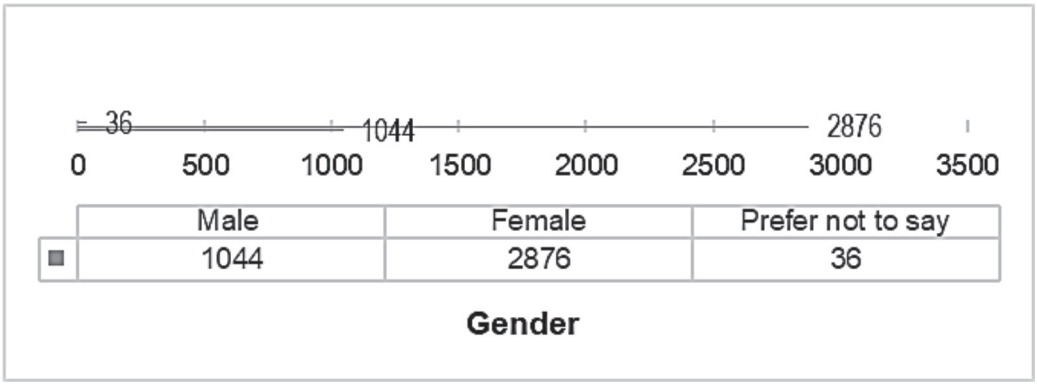


***Figure 2: Gender***

The majority 2876 (72.7%) of the participants were female and 1044 (26.4%) were male. 36 (0.9%) of the participants chose not to reveal their gender.

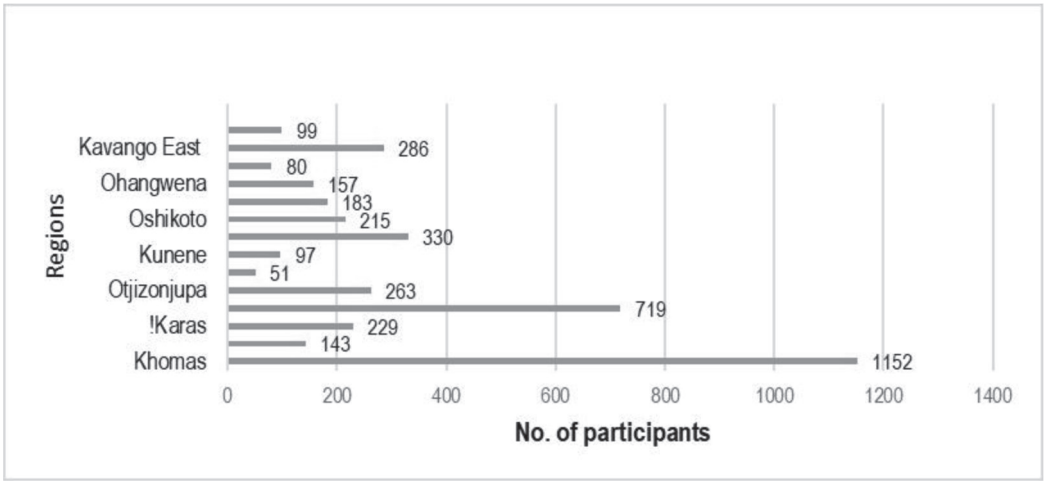


***Figure 3: Demographic location***

Of all 14 regions studied, the majority of the participants resided in the Khomas region while the minority lived in the Zambezi region. Khomas recorded 1150 (29.1%) participants, and Erongo 718 (18.1%). The participants from the southern regions were from Hardap 143 (3.6%), and Karas 229 (5.8%) particularly. Participation in the Otjizonjupa region was 263 (6.6%), Omaheke 51 (1.3%), Kunene 97 (2.5%), Oshana 330 (8.3%), Oshikoto 215 (5.4%), Omaheke 51 (1.3%), Ohangwena 157 (4.6%), Kavango West 80 (2%), Kavango East 286 (7.2%) and Zambezi 99 (2.5%). The assumption is that regions with a low participation rate may have experienced economic challenges and a lack of digital tools to access the Internet.

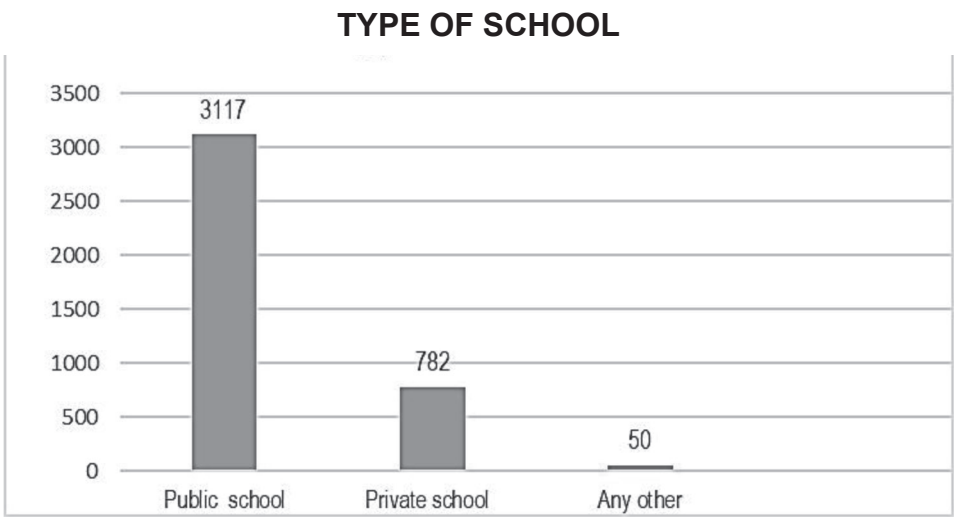


**Figure 4:** *Type of school*

The MoEAC of Namibia provides education to both public and private schools across the country. Participating parents/guardians reported that 3117 (78.9%) of their children attended public schools, 782 (19.8%) attended private schools, while 50 (1.3%) indicated other options that were not specified.

**Table1:** *Satisfaction with learning provided*

| **Has the school provided distance learning?** | **Yes** | **No** | **Not yet** |
|---|---|---|---|
| | 939 | 2922 | 106 |

In response to the question of whether the school had provided distant learning during the lockdown, a total of 3967 (100%) participants responded. 939 (23.7%) affirmed, 2922 (73.7%) said 'no,' and 106 (2.6%) said 'not yet'. Even though 23.7% of the parents affirmed that some sort of distance learning was provided via WhatsApp, the majority of the parent's expectations of the provision of education for their children from pre-primary to Grade 12 was in the main/in general not met during the COVID-19 lockdown.

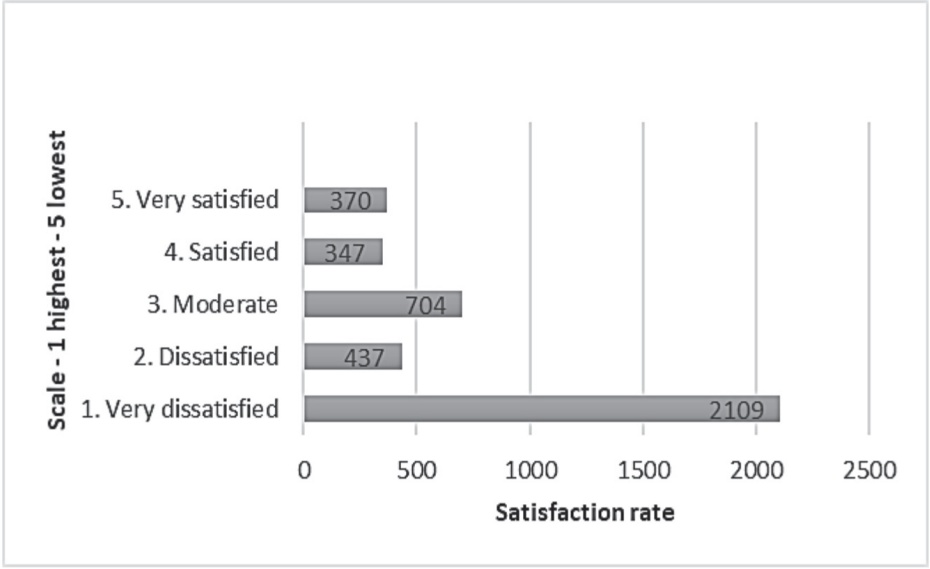


***Figure 5: Satisfaction rate***

The participants rated the learning provided during the COVID-19 lockdown on a 5-point Likert scale with 1 denoting (very dissatisfied), 2 (dissatisfied), 3 (moderate), 4 (satisfied), and 5 (very satisfied).

From a total of 3958 (100%), 2100 (53%) of the participating parents/guardians were very dissatisfied with the learning provided, 437 (11%) dissatisfied, 704 (17.7%) moderately satisfied, 347 (8.7%), and 370 (9.3%) satisfied. The results confirmed that 53% of the participating parents' need for education during COVID-19 was not positively met.

## *Qualitative data analysis*

The process of data analysis includes direct quotes from the participants to support identified themes and the interpretation of possible meanings derived. These results are discussed under the main themes in the section below.

## 8. Barriers to distant learning

### *Communication*

In the initial stage of COVID-19, the education sector experienced several challenges related to communication. Many participating parents revealed that lack of communication was the biggest challenge during this time. In a narrative, the following concern was revealed: “My son was not provided with any learning materials. There was no communication from the school or teachers” [1:13]. Also, “My children are in Grade 2 and Grade 12. We have not received any information from the school” [2:13]. Teachers’ lack of computer literacy and knowledge of using digital platforms and ICT’s may have impacted their responsiveness to using digital platforms during communication and teaching and learning. Teachers needed to engage in tasks such as coaching, assessing, and providing subject matter expertise (Ferri et al. 2018). Their lack of communication could be attributed to a shortage of skills, personal culture, beliefs, and attitudes toward the use of e-learning platforms. Further research could reveal the exact reasons for the Namibian teachers’ lack of communication during COVID-19 lockdown.

### *Teaching and learning*

Parents revealed their desire for the continuation of the education of their children, pre-primary to Grade 12 via e-learning platforms, but also their shortcomings concerning the use of electronic media to assist them during the lockdown. Distance learning requires the use of technologies and the alignment of learning objectives and outcomes with the curriculum. The following quote reveals the participants’ lack of skill or fear to use digital platforms for learning: “my child does not have experience in using distance learning, neither do I have any” [3:13]. Furthermore, a participant negatively remarked that “Distance learning is the worst mode of education. There is not proper teacher-learner interaction” [4:13]. Another participant revealed that “My Grade 1 and 3 children received worksheets on WhatsApp. The Grade 4 learner did not receive any learning materials. The teachers just shared the information on this platform. There was not any interaction with the learners” [5:13]. Furthermore, a participating parent indicated that “My Grade 6 daughter’s teacher just revise. It is difficult to guide her. I am unaware of what the Namibian curriculum requires” [6:13]. Distance learning for basic education is a new concept for parents, teachers, and learners of Namibia. Ferri et al. (2018) state that

> the evolution of Information and Communication Technologies (ICT’s) have changed the learning sector by stimulating the development of distance learning-based approaches (electronic, mobile, ubiquitous, and blended learning). Poor experience with ICT’s and lack of skill to use digital tools appropriately represent a challenge for teachers to use distance learning effectively. (p.78)

The results further revealed the participants' displeasure with distant teaching and learning: "I'm unhappy with distance learning. I do not have any teaching skills when it comes to primary children. They need much more attention and are learning the content that is shared for the first time" [7:13]. Studies (e.g Ertmer 1999; Saxena 2017) have revealed that second-order barriers to effective teaching are those attitudes, beliefs, and practices that are intrinsic to the educator. These are influenced not only by personal attitudes, but also by social contexts, cultural landscapes, and learned pedagogical practices. The COVID-19 pandemic necessitated changed roles. Parents became teachers with or without teaching skills, a situation that may have accelerated the respondents' attitude toward distance learning. Parents, teachers, and learners in the basic education environment of Namibia are accustomed to face-to-face learning and traditional modes of communication. The implication is that the majority of parents' expectations for teaching and learning were not positively associated with the use of ICT's in the provision of distance learning during the COVID-19 lockdown.

### *Economic challenges*

Lack of funding presents obstacles for schools to provide distance learning platforms as well as for learners to access these platforms. In a comment, it was revealed that,

"We do not always have data to access the internet. Therefore, we are unable to access learning resources on e-learning "[8:13].

The results further revealed that "Distance learning will only benefit children who have access to technology. There is no network in the area where I live and that will affect the learning possibilities of my children. Children living in towns can benefit from e-learning, but what about the children who stay in remote areas where internet connection is limited or parents do not have access to the internet? "[9:13]

Economic barriers pose a challenge to both teachers and parents to gain access to the Internet. Research by Durff and Carter (2019) shows that first-order barriers are extrinsic to the teacher. These include access to technology hardware. Moreover, in some regions of Namibia, socio-economic development is at a slow pace. Therefore, parents do not have access to ICT's and are therefore unable to support their children's digital learning. Because of the economic circumstances, many parents also face economic challenges that prevent them from affording the data that is required to access the Internet.

## 9. Suggestions to overcome challenges

### *Resources and equipment*

The COVID-19 pandemic posed challenges for the continuation of education at an institutional and individual level. In a comment, it was suggested that the Ministry of Basic Education, Art, and Culture of Namibia should "embrace technology like the rest of the world" [10:13]. The participant further suggested that teaching must continue via "YouTube or live stream classes"[10:13]

A participant remarked that " E-learning is a good idea, however, not all teachers are on board or have technology tools to render distant learning. They need training, assistance to acquire devices for the purpose, and clear guidelines on how to continue teaching and learning on these kinds of platforms" In a comment, it was also suggested that "teachers should prepare notes for learners in hard and soft copies" [11:13].

While several researchers have explored teacher participation and learning in online spaces (Trust, Krutka, & Carpenter 2016), Macià and García (2016) suggested that this area of teacher professional learning and engagement in online networks is at a relatively early stage of development. Unlike in Namibia where teachers just shared knowledge without engaging with the learners, Trust et al. (2016) show that teachers elsewhere "share experiences, knowledge, and materials, as well as provide emotional support, develop collective projects, and offer skills training" (p. 298). A participant stated that "distance learning is good in challenging times, but I sent my child to the village. We do not have electricity and access to the Internet in the village" [12:13]. Another participant commented as follows: "I do not have access to resources that can enable distant learning. There is no network or an Internet signal, and I don't have ICT devices and data to access digital learning platforms" [13:13].

## 10. Conclusion and recommendations

Access to technology played a pivotal role in the provision of distance learning during the COVID-19 lockdown. The main aim of this study was to source the views on and experiences of distance learning of the parents of pre-primary to Grade 12 learners in Namibia during the C0VID-19 lockdown. The research question for the study was, are parents' expectations for e-learning positively associated with the distance learning provided during the COVID-19 lockdown? This study employed a mixed-methods research design to collect and analyse data. The findings revealed that from a total of 3967 (100%) participants who responded, 939 (23.7%) answered 'yes,' to the question of whether pre-primary to Grade 12 learners had received any form of education during the COVID-19 lockdown. 2922 (73.7%) indicated 'no' and 106 (2.6%) said 'not yet'. Based on these results, a conclusion can be made that the majority of parents' expectations

of the provision of education for their children from pre-primary to Grade 12 were not met. Evidently, the lack of access to digital learning platforms as well as teachers' and parents' digital illiteracy contributed to this situation. The socioeconomic status of the role players seems to have been part of the problem. When educational institutions for the provision of basic education are supported and equipped with ICT's and skilled teachers, an e-learning teaching service is a valuable tool that can ensure the continuation of education in uncertain times, such as the COVID-19 pandemic.

The results revealed, furthermore, that teachers only shared information in online communities without constructively engaging learners on these platforms. Sharing information on digital platforms does not guarantee student learning. The results also revealed that even though parents had expectations of using e-learning platforms, their expectations of what constitutes distance learning were not met. While many researchers have explored teacher participation and learning in online spaces (Trust, Krutka, & Carpenter, 2016), Macià and García (2016) suggested, as pointed out earlier in this article, that this area of teacher professional learning and engagement in online networks is at a relatively early stage of development. The use of technology calls for teachers equipped with knowledge and competencies to adapt to education for the future. Unlike in Namibia where teachers have just shared knowledge without engaging with learners online, Trust et. al. (2016) show, as revealed earlier in the article, that teachers elsewhere 'share experiences, knowledge, and materials, as well as provide emotional support, develop collective projects, and offer skills training' (p. 298). Thus, there is a need for the professional development of practicing teachers and training of pre-service teachers to gain knowledge on how to use digital methodologies effectively.

The study recommends that policy-makers budget for and design a clear strategy on how to include digital learning across the curriculum for basic education. The study further recommends that technology becomes part of the teaching and learning process for pedagogical purposes and not just for sharing information. It is further recommended that professional development be provided to enhance teachers' digital competence, and that the MoEAC work on the technological infrastructure and organizational as well as institutional culture of schools to facilitate the optimal use of technology. Further research is recommended to find out how the curriculum for teacher training factors into the digital needs of teachers to coach, assess, and provide subject matter expertise in online platforms. The advantage of the implementation of distance learning during COVID-19 is that it allows for education while learners cannot attend school for 'fear of infection' to gain knowledge as usual during face-to-face interaction with the teacher. The study was limited by the lack of literature on the use of technology and distance learning for basic education.

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