

**THE UNIVERSITY OF ZAMBIA STUDENTS' EXPERIENCES ABOUT ONLINE
LEARNING DURING COVID-19 PANDEMIC LOCKDOWN**

BY

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requirements for the award of the Degree of Master of Education in Sociology of
Education.**

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DECLARATION

I, **Liswaniso Mathews Takazo**, declare that the work presented in this dissertation is my original work and has not been done in any other University or University of Zambia. The work that is not mine has been acknowledged accordingly.

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APPROVAL

This dissertation of **Liswaniso Mathews Takazo** has been approved as a partial fulfillment of the requirements for the award of the Degree of Master of Education in Sociology of Education of the University of Zambia.

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DEDICATION

I dedicate this work to the Almighty God, it is difficult to predict the future, but plans without thy Name are in vain. My wife (Yvette Malambo), children (Liswaniso Takazo and Liseli Takazo), sibblings Beauty Makete Takazo, Mwangala Takazo, Mwenda Takazo, Situmbeko Takazo, Grandmother (Bo Neta Imboela) thank you so much for the love! My late father Takazo Mushimbei, I'm still working hard. My mum (Catherine Simona Mwenda) a living angel, thank you so much for the prayers! All the family members you are great!

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ACROYNMS

COVID-19	Coronavirus Disease 2019
CMS	Content Management Systems
DQA	Data Quality Assurance
FGDG	Focus Group Discussion Guide
GB	Gigabytes
GSMA	Global System for Mobile Communications
ICT	Information and Communication Technology
IPA	Interpretative Phenomenological Analysis
LMS	Learning Management Systems
PhD	Doctor of Philosophy
RRT	Rapid response team
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNZA	University of Zambia
ZICTA	Zambia Information and Communication Authority

ABSTRACT

The study aimed to investigate the experiences of University of Zambia students with online learning during the Covid-19 pandemic lockdown. The study was guided by connectivism theory by George Siemens (2005). The study's objectives were to explore lived experiences students had about online learning during COVID-19 lockdown, to establish the benefits of online learning in times of COVID-19 pandemic lockdown and to establish challenges which students faced when using online learning during COVID19 pandemic lockdown at the University of Zambia. The study used a qualitative research design because this design is ideal as it explores and understands the meaning individuals or groups ascribe to a social or human problem. The sample for the study was 20 respondents who were purposive selected. These 20 students were subjected to a focus group discussion. Data was analysed qualitatively using thematic analysis. The study revealed some positive and negative experiences. The positive experiences included: the flexible nature of online learning, conduciveness of online learning and anonymity nature of online learning. The negative experiences included but not limited to: unequal access to online learning, social interaction and digital divide. The findings further showed the following benefits of online learning: availability of recorded lessons/lectures, availability of additional resources/materials on the internet, reduced numbers of COVID-19 cases amongst students among others. Some notable challenges encountered by students included: poor internet connectivity, unaffordable data bundles, lack of online learning facilities, limited number of students some online platforms could accommodate, lack of interaction, power cuts, digital divide and uncondusive home environment. Given the above, the study recommended that the government should improve ICT infrastructure, internet services and access in the country. To enhance online learning, universities should be provided with more ICT equipment.

Key Words: experiences, online learning, online platforms, COVID-19, Pandemic, teaching.

CHAPTER ONE:

INTRODUCTION

1.1 Overview

This chapter focuses on the background of the study, the statement of the problem, the purpose of the study, study objectives and questions, the significance of the study, delimitation, and limitations of the study and theoretical framework. It ends with operational definitions of terms used in the study.

1.2 Background to the study

The outbreak of the novel coronavirus disease COVID-19 in 2019 in China's Wuhan city impacted the whole world and the education sector enormously. According to UNESCO's Global Coalition Report (2020), as of 1st April 2020, more than 3.4 billion people, representing 43% of the world population, were in lockdown in more than 80 countries and territories worldwide. The lockdown and social distancing measures immediately had an enormous impact on education, with schools and institutions of higher learning closed by 1st April 2020 in 185 countries, affecting 1,542,412,000 learners, which constituted 89.4% of the total enrolled learners.

In China, the Government was forced to close educational institutions nationwide to avoid the spread of COVID-19 (Sun et al., 2020). Chinese Government further set out to open about 24,000 online learning programs selected by the Ministry of Education (Ministry of Education of the People's Republic of China, 2020). The closing of learning institutions was not only in China but globally. By 20th March 2020, there were more than 769 confirmed cases of coronavirus in 37 nations across Africa (Moeti, 2020). Like other government around the globe, when cases were reported in Africa, African countries took actions and possible measures to contain the few cases by closing education institutions and isolating the affected persons.

When Zambia recorded its first confirmed COVID-19 case on 18th March 2020, the Government of the Republic of Zambia (GRZ) took measures, including school closures, to prevent the virus from spreading widely. A National Address by the then President of Zambia, His Excellency Mr Edgar Chagwa Lungu, on 25th March 2020, provided several initial behavioural change measures to keep the public safe. Prior to the President's address to the nation, on 20th March 2020, the Minister of Health ordered the closure of all schools, colleges and universities as a step to curtailing large congregations of people at one time in one place while contact tracing was conducted for the first identified patients of COVID-19. This action disrupted learning for more than 4.2 million children and adolescents (MoGE, 2020).

To ensure continued learning, some universities opted to remain open by switching to eLearning (online learning) (Mulenga & Marbán, 2020). While this move was forward-looking, in Zambia, online learning is generally not a popular mode of instruction because the education system is based mainly on traditional face-to-face instruction. The unpopularity of online learning is attributed to various challenges such as power outages, unreliable internet access and lack of online learning devices by instructors and students. Internet access is also expensive and primarily restricted to urban areas (Chola et al., 2020). Poor ICT (Information and Communication Technology) skills and unfavourable academic conditions at home are also severe challenges to eLearning (Chola et al., 2020; Hapompwe et al., 2020; Mulenga & Marbán, 2020; Sintema, 2020b).

Online learning is generally a method of teaching that is performed over the Internet (Higher Education Authority [HEA] 2009; Carey & Trick, (2013) and is almost asynchronous teaching (Council on Higher Education [CHE] 2014). Bates (2016, 111) observes that online learning has brought new models or designs into teaching and learning. Students interacted online among

themselves and with their teacher, material content and obtain support (Ally, 2008). The increase in this mode of instruction has primarily been generated by a surge in internet and technological advancement (Aristovnik et al., 2017; Maphalala & Adigun, 2020). Online learning is a learning process which, in its implementation, uses electronic technology, especially information and communication technology. Online learning allows students to learn through computers or other electronic technologies in their respective places without having to go to class. The rapid technological developments have made distance education and online learning easy (McBrien et al., 2009). “Most of the terms (online learning, open learning, web-based learning, computer-mediated learning, blended learning, m-learning.) have in common the ability to use a computer connected to a network, that offers the possibility to learn from anywhere, anytime, in any rhythm, with any means” (Cojocariu et al., 2014).

Types of Online Learning

a. Synchronous

Synchronous means that students attend live lectures, real-time interactions between educators and learners, and instant feedback is possible. This allows lecturers and students to interact directly online. In practice, both teachers and students use the internet. Lecturers provide learning materials in the form of papers or presentation slides and students can listen to presentations directly via the internet. Students can also ask questions or comments directly or through the chat window. Synchronous learning is a virtual representation of a real class (Chaeruman, 2017). Singh & Thurman, (2019) further state that in such environment students can be anywhere (independent) to learn and interact with instructors and other students.

b. Asynchronous means that learning content is not available in live lectures or classes but at different learning systems and forums. Instant feedback and immediate response are impossible in such an environment (Littlefield, 2018). Basilaia et al. (2020) state that, online learning platforms are needed where:

1. video conferencing with at least 40 to 50 students is possible,
2. discussions with students can be done to keep classes organic,
3. Internet connections are good,
4. lectures are accessible on mobile phones also and not just laptops,
5. possibility of watching already recorded lectures and
6. instant feedback from students can be achieved, and assignments can be taken.

Like other countries across the world (Basilaia & Kvavadze, 2020; Dhawan, 2020), the Zambian education system has predominately been based on traditional schooling that requires learners to attend classes in person daily (Mulenga & Marbán, 2020; Sintema, 2020a). This situation generally applies to the education system from elementary to higher levels. However, in the past few years, institutions of learning in Zambia, notably higher education, have rapidly embraced the non-traditional modes of instruction - online education (Sintema, 2020a; Mulenga & Marbán, 2020). These measures could be attributed to increased student enrollment and the country's emerging need for skilled human capital. It is necessary to mention that the coronavirus outbreak, which led to the indefinite closure of learning institutions in March 2020, inevitably compelled the country to adopt online teaching and learning modalities (Sintema, 2020a; Mulenga & Marbán, 2020).

The University of Zambia and other universities across the country were not spared from this harsh reality of COVID-19 as students and lecturers opted for this mode of learning. Daka et al. (2022) reported that students at the University of Zambia experienced learning challenges during the pandemic, which included poor network connectivity, failure to access and upload educational materials on the platforms (Google Meet, Zoom meeting, Astria, WhatsApp, email among others) and lack of digital skills.

During this period of a new norm of COVID-19 on social and physical life, there was a need to understand the lived experiences encountered by the University of Zambia students with regards to online learning during the COVID-19 pandemic lockdown.

1.3 Statement of the problem

The problem the study investigated was students' experience concerning online learning during the COVID-19 pandemic lockdown. Allo (2020), Sun and Chen (2016), Pietro (2020), Tomažević (2020) and Dhawan (2020) record the importance of online learning modes in times of crisis. Online platforms have proved to be helpful in difficult times like natural disasters, pandemics, and conflicts.

Most studies done in Zambia and elsewhere during covid 19 generally focused on examining the impact of COVID-19 on education, assessment and its various stakeholders-students, teachers, school administrators, and families (Hapompwe et al., 2020; Kapasia et al., 2020; Sintema, 2020a; Upoalkpajor & Upoalkpajor, 2020). Other studies generally focused on examining the shift from the traditional face-to-face method of instruction to online learning (eLearning) due to the abrupt closure of learning institutions worldwide (Naciri et al., 2020), the current study aimed at investigating the lived experiences of students about online learning during COVID-19 pandemic at the University of Zambia so that interventions can be put in place by the university and

government in helping students thrive in future crisis. It is important to note that most universities in the country were not ready and did not have all necessary facilities and information and communication infrastructure (ICT) for online learning and other online activities during COVID-19 pandemic lockdown. Understanding these experiences is crucial for developing evidence-based recommendations to enhance the quality, equity, and effectiveness of online learning at UNZA. The current study will also help in establishing mitigating measures and pathways to ensure continuity of education among students at UNZA. It is from this background, this research has been done to try and understand the experience of these critical stakeholders' experiences during the pandemic lockdown.

1.4 Purpose of the study

The study aimed to investigate students' experiences about online learning at the University of Zambia during the coronavirus pandemic 2019 lockdown.

1.5 Study Objectives

1. To describe students' lived experiences about online learning during COVID-19 lockdown at the University of Zambia.
2. To establish the benefits of online learning in the time of COVID-19 pandemic lockdown at the University of Zambia.
3. To establish challenges students faced when using online learning during COVID-19 pandemic lockdown at the University of Zambia.

1.6 Research Questions

The study was guided by the following research questions:

1. What are the experiences of students about online learning during COVID-19 pandemic lockdown at the University of Zambia?
2. What are the benefits of online learning in time of COVID-19 pandemic lockdown at the University of Zambia?
3. What challenges did students face when using online learning during COVID-19 pandemic lockdown at the University of Zambia?

1.7 Significance of the study

The study findings will provide valuable empirical evidence for UNZA administrators and faculties to identify the specific challenges and benefits encountered by students. The findings will further inform the development and implementation of targeted interventions and support mechanisms to enhance the quality and equity of current and future online learning initiatives, including addressing issues related to digital divide...(Hodges et al., 2020). The study is significant because it will provide a critical understanding of the lived experiences of the University of Zambia students during the COVID-19 pandemic's shift to online learning. By exploring their challenges and adaptations, the research informs the development of equitable and effective online education strategies for future crisis and beyond.

The findings of the current study may bring about new knowledge to enrich the disciplines of Sociology of Education and Information Communication and Technology (ICT) by informing the policy makers of how improved ICT infrastructure to enhance efficiency in different sectors in the country. Additionally, the study might be helpful to government's understanding of online learning challenges in universities so as to develop policies that will provide permanent solutions our current ICT challenges in the country. Mutula (2018) the research will inform national higher education policy and practice regarding the integration of digital learning and the need for strategic

investments in the ICT infrastructure and capacity building to ensure resilient and equitable access to education in times of crisis and beyond.

1.8 Theoretical framework

This research was guided by Connectivism Learning Theory by George Siemens (2005). The theory suggest that, modern day learning occurs through network connections as individuals share their interests, knowledge, perspectives, expertise, and opinions online or virtual learning environments. The theory further posits that knowledge is not only acquired through traditional means such as textbooks or lectures but also through online communities, social media, and other technological platforms. Since, the theory state that modern day learning occurs through network connections and that knowledge is not only acquired through traditional means (textbooks or lectures), the study decided to take the root of connectivism to understand the students' experience about online learning during COVID-19 at the Universirty of Zambia.

This study used connectivism learning theory as it offered explanations which were in line with the focus of the study. Siemens (2008), stated that connectivism is a learning theory that is comprised of different series of nodes to connect hundreds of networks to facilitate synchronous and asynchronous learning. These nodes can be people, resources, or technologies, and they are linked together through the learner's own personal learning network. These connections provide individuals with direct access to reliable information from millions of sources to duplicate, reproduce, and share within their social networks, and to delete, critique, and discard inaccurate, irrelevant, and unreliable information.

In this study, the connectivism learning theory was applicable in the sense that it offered an explanation on how students and educators leveraged on technology to learn and teach respectively.

The theory also emphasises the importance of networks, connections, and the integration of new information and ideas into existing knowledge structures. The theory further stresses the importance of improved ICT infrastructure in the country in order to enhance online learning. Therefore, good internet connectivity results into improved online learning.

1.9 Limitations of the study

Kasonde-Ng'andu (2013), state that limitations are the potential weakness of the study. Similarly, this study could have not be conducted without limitations. For this reason, COVID-19 became a major limiting factor in selecting a more extensive sample, as there were government regulations on the number of participants to be met at a particular time. With this in mind, the researcher and participants ensured that health and government guidelines were observed during data collection. These limitations affected all the research stages processes because of government regulation which were put in place. The other limitation of the study was the lack of triangulation. Triangulation, which involves using multiple data sources or methods to cross-verify findings. This was not employed in this in this research.

1.10 Delimitations of the study

The scope of the study was only restricted to the University of Zambia (UNZA), in Lusaka District; and was confined only to undergraduate students. Therefore, this study's findings would not be generalised to other universities and beyond the selected university.

1.11 Operational definitions of terms

COVID-19: a disease caused by the corona virus. Corona virus is a virus that attacks the respiratory system. This virus can cause mild disorders of the respiratory system, severe lung infections, and

even death. This virus is an infectious disease that can attack anyone, the elderly (older people), adults, children, to pregnant women and breastfeeding mothers, etc

Digital divide: a concept which refers to uneven access and distribution of information and communication technologies in societies.

Experiences: something related to something that has happened. Experience is a thing or event that has been passed on or experienced by a person through a number of activities and interacting with other people (Sagala, 2013). Sagala also said that experience is the key concept of humans for all things, because it is a reality that has permeated and nurtured humans.

Online learning: taking of courses online instead of a physical classroom.

Online Platform: a digital service accessible through the internet that allows users to interact with each other, exchanges information, conduct transactions.

Social media: are interactive computer-mediated technologies that facilitate the creation or sharing of information, ideas, career interests and other forms of expression via virtual communities and networks.

Student: a person studying at a university in order to enter a particular profession.

1.12 Summary of the chapter

This chapter gave the background of the study, statement of the problem, purpose of the study, research objectives and questions, significance of the study, theoretical framework, limitations and delimitation of the study and operational definition of terms.

CHAPTER TWO: LITERATURE REVIEW

2.1 Overview

This chapter reviews related literature on the experiences students had about online learning during Covid-19 in institutions of higher learning.

2.2 Global Literature on online learning in higher learning institutions

A study done by Blackmon et al (2012) in the United States of America (USA), examined students experiences in online courses. A qualitative research synthesis. The study findings indicated a number of students experiences such as: the students most often spoke of access in terms of being able to go to school and still maintain and balance a family life. The findings of this study further indicated that students experienced joy, enthusiasm and satisfaction about the opportunity presented to them through distance learning to improve their education and professional development while at home. Study findings that instructor accessibility was an important experience that emerged from the data. Instructors were able to bend over backwards to help and always quick to respond within 24 hours, opportunities to Connect with peers, isolation, panic, isolation, frustration, anger. This is study by Blackmon was done in a different setup the USA and it was done there was no pandemic unlike the current study which was conducted during COVID-19 pandemic lockdown. The findings of these studies might be differ in one way or the other.

Gorbaniuk et al (2020), a study done in Poland investigated the effects of student online learning experience (SOLE) during the COVID-19 Pandemic on students' satisfaction, adjustment, performance, and loyalty. A qualitative online survey study. Quantitative data was collected through

an online survey from 362 international students and 488 domestic students at a large Polish University. Correlation and path analysis within a conceptual model of student online learning experience during COVID-19 and its academic outcomes established that SOLE explained adjustment, performance, satisfaction, and loyalty; academic adjustment predicted performance, satisfaction, and loyalty; academic performance and satisfaction predicted student loyalty; and academic performance predicted satisfaction. Interestingly, time spent in quarantine/self-isolation did not exert any effect on academic outcomes in SOLE. Moreover, qualitative data collected via narrative interviews with 13 students (11 international and 2 domestic) developed our understanding of SOLE and its outcomes. This study by Gorbaniuk used an online survey to collect data from the participants, without knowing how they researched made sure that data was collected from the actual people or robots. The current study current data from the actual participant and used focus group discussion, the results might not be the same due to difference in the sample sizes of these studies.

A study by Brown, C. et al, (2021) in New Zealand investigated University students online learning experiences in COVID-times. A survey study. The study findings indicated negatives experiences such as too many distractions and routine disruption while positive experience included: flexibility of self-paced learning. The findings of this study might not be the same with findings of the current study due to different location (New Zealand and Zambia) the two studies were done and the methodology that were used. Tang et al. (2020), who examined the efficacy of different online teaching modes among engineering students. Using a questionnaire revealed that students were generally dissatisfied with online learning, particularly in communication and question-and-answer modes. The combined online teaching model with flipped classrooms improved students' attention, academic performance, and course evaluation.

Kapasia et al. (2020) in India investigated how lockdown impacted students' learning experiences. The study revealed that lockdown made significant disruptions in students' learning experiences. The students also reported some challenges that they faced during their online classes. These include anxiety, depression, poor Internet service, and an unfavourable home learning environment, which were aggravated when students were marginalised and from remote areas. Contrary to Kapasia et al.'s (2020) findings, Gonzales et al. (2020) found that students' confinement during the pandemic significantly positively affected their performance. They attributed these results to students' continuous use of learning strategies, which, in turn, improved their learning efficiency. However, the above study was in the United States, a different context from Zambia. It is unknown if similar trends can be found in the Zambian setup.

Aucejo et al. (2020) investigated the impact of COVID-19 on student experiences and expectations. They surveyed approximately 1,500 students at one of the largest public institutions in the United States. The results from the survey revealed that due to COVID-19, 13% of students had delayed graduation, 40% lost a job, internship, or job offer, and 29% expected to earn less at age 35. Furthermore, the study showed that the economic and health-related shocks induced by COVID-19 varied systematically by socioeconomic factors and constituted key mediators in explaining the pandemic's extensive (and heterogeneous) effects. Therefore, the current study differs from Aucejo's study as it specifically focused on the experiences of students during online learning and this study was qualitative while the above study was survey.

Shachar and Yoram (2003) and Shachar and Neumann (2010) conducted a meta-analysis of studies from 1990 to 2009. They found that in 70% of the cases, students taking courses by online education outperformed students in traditionally (face-to-face) instructed courses. In addition, Navarro and Shoemaker (2000) observed that learning outcomes for online learners were as effective as or better

than outcomes from face-to-face learners, regardless of background characteristics. In a study on computer science students, Dutton et al. (2002) found that online students performed significantly better than students who took the same course on campus. Contrary evidence by Brown and Liedholm (2002) based on test scores from macroeconomics students in the United States suggests that face-to-face students tend to outperform online students. These findings are supported by Coates et al. (2004), who based their study on macroeconomics students in the United States, and Xu and Jaggars (2014), who found adverse effects for online students using a data set of about 500,000 courses taken by over 40,000 students in Washington. Furthermore, Almatra et al. (2015) and Chisadza (2021) have compared overall course grades between online and face-to-face students for a Telecommunications course and found that face-to-face students significantly outperformed online learning students. However, this study is needed because of the contrasting findings from these studies.

In South Africa, a study was done by Chisadza et al. (2021) to investigate the factors that predict students' performance after transitioning from face-to-face to online learning due to the COVID-19 pandemic. It used students' responses to survey questions and the difference in the average assessment grades between pre-lockdown and post-lockdown at a South African university. The study found that students' performance was positively associated with good Wi-Fi access relative to using mobile internet data. It further revealed lower academic performance for students who found online transitioning difficult and who preferred self-study (i.e., reading through class slides and notes) over assisted study (i.e., joining live lectures or watching recorded lectures). However, this study was student-oriented; it did not investigate factors that predict lecturer performance.

2.2.1 Lived experiences of students about online learning during COVI-19 pandemic lockdown

Research has demonstrated that this COVID-19 situation induced concerns in students about academic activities along with social and economic affairs, as well as fear of infection (Al-Tammemi et al., 2020). Some research still shows that lockdown negatively affects students' academic study, including learning interruptions and disruption to assessment, and the impact is more severe on students from disadvantaged backgrounds (UNESCO, 2020a). Students experienced significant educational disruptions as the pandemic interfered with their academic functioning (Charles et al., 2020).

One factor frequently examined is the development of community and peer interaction in a traditional classroom setting compared to an online learning environment. Literature suggests that a strong and active social life on campus can be “used to explain both high persistence and learning satisfaction” (Rovai et al., 2005, p.4) amongst learners, thus leading one to believe that the lower persistence rates of the online course are caused by a lack of community and social connectedness which lecturers and students usually experience in an online learning environment. A study by Rovai, Wighting, and Lui suggested that “online students feel a weaker sense of connectedness and belonging than on-campus students who attend face-to-face classes” (Rovai et al., 2005, p.4). Donlevy firmly states that the absence of peer interaction can negatively affect some aspects of the learning process. He further, explained that the “social and emotional aspects of learning are as important as the technical information” (Donlevy, 2003, p. 120) taught to students.

Pietro et al. (2020), European Joint Research Centre (JRC) reported that COVID-19 and the closure of schools did not affect students equally. Students from less advantaged backgrounds experienced more significant learning loss during this emergency than their more advantaged counterparts. This

was due to differences in non-financial parental support, parental financial resources, schools attended and students' digital skills. Significant learning disparities also emerged between native students and migrant students.

Additionally, instructors' lack of non-verbal communication was also identified as a significant challenge or experience faced by students. According to communication theorists, verbal messages are conveyed through words, whereas nonverbal messages are conveyed beyond the actual meaning of words, which typically complements spoken words (Manusov, 2016). The psychological closeness a student may feel with their instructor is primarily based on the instructor's nonverbal clues. Nonverbal communication comprises things such as eye contact, gestures, and posture.

Covid-19 has emphasised the 'digital divide' in Zambian institutions of higher learning, especially amongst students from disadvantaged families. Chalita and Erik (2011) define the digital divide as a concept born in the 1990s. It refers to the gap separating those with access to new information technology and those who do not have access. In 2013, 46.7% of households in Zambia had access to a computer, and by 2015, only 12.7 of households had access to the internet (ZICTA, 2015). This statistic indicates that the digital divide in Zambia is a serious concern and a massive hindrance to the implementation of eLearning. This is more pronounced on the African continent, and sadly, there are no quick fixes to the digital divide in Africa, but several strategies can be rolled out to mitigate it Toquero, (2020).

2.2.2 Benefits of online learning

Bos, Groeneveld, Bruggen, and Brand-Gruwel (2016) conducted a study in the Netherlands. This study investigated the use of recorded lectures in education and the impact on lecture attendance and exam performance. The participants were 396 first-year university psychology students attending a mandatory course on biological psychology. Results revealed that many students used

the recorded lectures as a substitute for lecture attendance. The group that used recorded lectures as a supplement when developing a knowledge base scored significantly higher on the assessment. In addition, a study by Dhull & Sakshi (2017) conducted in India found that students of elearning programs had higher achievement levels than their counterparts. This is so because students can find unlimited and latest information they can access just by clicking a button.

Khalil et al. (2020), conducted a study to investigate the effects of the sudden transition from face-to-face to synchronized online learning during the COVID-19 pandemic in Saudi Arabia employing a qualitative study exploring medical students' perspectives. Sixty medical students were recruited using a maximum variation sampling technique; these students then participated in eight focus group discussions. Thematic content analysis yielded positive results in that all participants agreed that online sessions were time-saving and that their performance was improved due to the enhanced utility of time. In Zambia, however, it was not known whether or not students' experience with online learning saved time and improved students' performance, hence the current study.

Dung (2020) conducted a study in Vietnam. This study looked at the advantages and disadvantages of virtual learning. The study took place at the Department of English Languages of Hong Bang International University during Semester 2 of the 2019-2020 academic year, based on a survey with 205 students and 22 lecturers. For Students, virtual education was widely appreciated for its flexibility, cost-effectiveness, and convenient access. With asynchronous courses, students can enjoy a more flexible schedule that conveniently fits their available time and location. Virtual learning also allows students to access different courses and programs. Virtual learning is a dynamic alternative for self-motivated students who can constantly stay on task and monitor their learning goals.

Technology offers opportunities to promote interaction between learners, learners and lecturers as well as with experts in open and distance learning (ODL). One of the researches shows that interaction can increase learning and lessen the psychological distance involved in ODL (Mayes et al., (2011). Similarly, interactions can help achieve learning outcomes and thus ensure successful learning; interactions can be facilitated in ODL through practical technology. Interactive technology with the affordances of two-way communication and multiple representations may provide more interactions for online learners, thus leading to enhanced learning outcomes (Hyo-Jeong, 2010). Interaction promotes students' motivation and enhances the whole learning process. According to

Espasa & Menses (2010), as cited by Croxto (2014), online courses with high levels of interactivity lead to higher levels of student motivation, improved learning outcomes, and satisfaction over less interactive learning environments.

A study by Iloanya and Mathew (2016), in Botswana examined open and distance learning: benefits and challenges of technology usage for online teaching and learning in Africa. Web-based surveys were used to collect the data for this study. The study was carried out among the online lecturers and learners in two institutions of Higher Learning. Nine experienced lecturers and twenty five learners who had used technology for their ODL teaching and learning participated in this study. Findings indicate that the significant benefits of using technology for online teaching and learning include interaction and student engagement, access to the latest information, content sharing and communication.

Muzata (2013) in Zambia studied distance education students' experiences of learning from audio-recorded lectures at colleges of education. The study employed a qualitative approach. Study results showed students' high appreciation of audio-recorded lectures. It further revealed that audio-recorded lectures helped them improve their learning performance through content retention, passing of examinations, improved study habits, and easy access, among others. Students with vision problems found the audio-recorded lectures more helpful than relying on their colleagues to read for them.

Chola and Kasimba (2020) conducted a study in Zambia to investigate COVID-19 and e-learning: perception of freshmen-level physics students at Lusaka Apex Medical University. A sample size of 210 students was purposively sampled, and a questionnaire was used to collect data. The study reported that students perceived e-learning as convenient for lessons, easy to submit assignments, and readily available online learning resources.

2.2.3 Challenges faced by students during online learning

Tauhidah et al (2021) conducted a study in Indonesia to investigate lecturers' utilisation of e-learning platforms during the COVID-19 pandemic. This study aimed to analyse the use of e-learning platforms during the COVID-19 crisis, especially in the biology education program. The study used a quantitative survey design. Through purposive sampling, 100 lecturers from 43 universities in

Indonesia participated in this study. The findings showed that WhatsApp, Google Classroom, and Zoom remain Indonesian universities' most used e-learning platforms due to their accessibility and affordability. Participants' obstacles during online learning centered on the limited network and quota and controlling aspects. However, the study above was narrow in scope as it did not include students but concentrated on lecturers who are not the only stakeholder in the learning process so it was important to do a study that looked at students so that we understand the if student would face similar challenges and this study was done specifically in the biology education program. This component made the current study unique as it investigated the experiences of students doing different programs at UNZA .

Tauhidah et al.'s (2021) study revealed that online learning was complex in transferring learning materials. The difficulties in transferring learning materials were classified as follows:

1. Difficulties in explaining certain materials because they (lecturers) were not face-to-face with students.
2. Difficulty in doing practical activities.
3. Preparation takes more time and effort than offline classes.

These challenges are supported by Humphrey and Wiles (2021), who reported that almost all students preferred face-to-face learning over online learning because it was easier to engage and learn material content. It is easier to conduct discussions and ask questions directly and quickly, especially for biology students who are accustomed to laboratory activities but lack hands-on activities experience. Raju (2020) studied lockdown challenges to higher education in India. This study revealed that students had challenges accessing internet connectivity, especially those hailing from rural and remote areas. These students were expected to have a smartphone with 4G compatibility to enable streaming of the live teaching. While the study above was conducted in

India, it provided insights into challenges faced by students in higher learning institutions; it was unclear whether the current study would report similar findings on the challenges students faced at the University of Zambia (UNZA).

Singh and Quiaraishi (2021) in India did a study amongst 844 students from different colleges and universities in the Haryana and Punjab regions of North India. The study examined the challenges faced in learning during the lockdown and whether they raised mental stress in students. The study found that most students were facing difficulties in their studies during the lockdown, which increased their mental stress. A similar study was done by Sprang and Silman (2013), which showed that children who were isolated or quarantined during pandemic diseases are more likely to suffer from acute stress disorder, adjustment disorder, and grief. The above studies were done in India, a different set-up altogether.

A study by Makeri and Uzorka (2020) in Uganda investigated the Academic Challenges Students in Higher Education faced during the COVID-19 Pandemic. The study population consisted of undergraduates, postgraduates and lecturers in selected universities in Uganda. The researchers adopted a qualitative approach, which involved using questionnaires and interviews. One hundred twenty students and ten lecturers participated in the study. The study revealed that students complained that they could not afford to buy data during lockdown, ranking it the second most serious challenge. However, the study just looked at the academic challenges faced by students but needed to indicate what challenges they faced and the gap this study intended to fill.

In Zambia, a study was done by Mtonga & Kombe (2020) to find out the challenges and interventions of learning for under-resourced students amid the COVID-19 lockdown: a case of a Zambian public university. This study revealed that the most critical barriers to eLearning were the lack of ICT facilities/devices (laptops, smartphones, tablets and desktops), internet, electricity, and

support systems. Another study by Mukosa and Mweemba (2019) in Zambia indicates that a lack of adequate investment in ICT infrastructure has led to the high cost of internet services, impacting the expansion of eLearning programs. The quality of the internet in Zambia is also a massive challenge in delivering eLearning, especially since attitudes and cultural issues are still barriers that need to be broken down for eLearning to succeed. The findings also revealed that Africa needs more investment in ICT, which negatively impacts eLearning integration in learning institutions. While the above findings show that there was lack of massive investments in ICT infrastructure: a significant hindrance to online learning in Zambia and African at large, this study sought to understand the experiences of students with regard to online learning at the University of Zambia (UNZA) during the COVI-19 pandemic. Mtonga and Kombe's study investigated the challenges and interventions of eLearning for under-sourced students. This study, however, wanted to uncover the experiences encountered by both under-sourced and well-sourced students with regards to online learning at UNZA during COVID-19 pandemic lockdown.

2.3 Gaps in Literature

The impact of COVID-19 on education varied between developed and underdeveloped countries. This, therefore, suggests that institutions of learning from underdeveloped countries were highly impacted. A study by Singh and Quiaraishi (2021) looked at challenges faced in learning during the lockdown and whether they raised mental stress in students. However, the current study differs from this study because its main focus was on the mental stress of students. However, the current study looked at the general experience of students during the pandemic lockdown. Bos et al (2016) conducted a study in the Netherlands investigating the use of recorded lectures in education and the impact on lecture attendance and exam performance. This study differs from the study afforesaid because it evaluated recorded lectures in education, but the current study investigated online

learning during the COVID-19 pandemic lockdown. In South Africa, a study was done by Chisadza et al (2021) to investigate the factors that predict students' performance after transitioning from face-to-face to online learning due to the COVID-19 pandemic. This study is different from the current study because it used a survey method, but the current study used a qualitative study. Mtonga & Kombe (2020) conducted a study to find out the challenges and interventions of eLearning for under-resourced students amid COVID-19 lockdown: a case of a Zambian public university. This study found that the most critical barriers to eLearning were the lack of ICT facilities/devices (laptops, smartphones, tablets and desktops), internet, electricity, and support systems. This study looked at one particular group of under-sourced students. However, the current study looked at challenges faced by both under-sourced and well-sourced students.

2.4 Summary of the Chapter

This chapter has presented literature under themes which have been identified for the study. Literature has been reviewed from different parts of the world, Africa and Zambia in particular. From the reviewed literature, gaps have been identified to ground this study.

CHAPTER THREE: METHODOLOGY

3.1 Overview

This chapter presents the methodology that was used in the study. It begins by giving an overview of the study's research design. Then, it gives the study population and sample size, including the tools and instruments used to collect data. It further explains how the data was analysed and ends with the ethical consideration.

3.2 Research Design

Kombo and Tromp (2006) define a research design as a glue-like structure that holds all the elements in a research project together. Orodho (2003) defines it as the scheme, outline or plan used to generate answers to the research problem. This study utilised phenomenology research design because it focuses on structure of an experience. Phenomenology opens a gateway to the intricate landscapes of human experience, allowing us to delve into the depths of lived realities and explore the essence of our being. Larsen, (2023, p. 15) Phenomenology thematises the phenomenon of consciousness, and in its most complete sense, it refers to the totality of lived experiences that belong to a single person (Giorgi, 2009). Therefore, phenomenological research aims to clarify situations lived through by persons in everyday life (Giorgi & Giorgi, 2003).

According to Merriam and Associates (2002), a phenomenological study focuses on the essence of experience. The interest is in showing how complex meanings are built out of simple units of direct experience. It is, therefore, also an attempt to deal with the inner experiences of everyday life. This means that the study studies a particular phenomenon, such as online learning during the COVID-

19 pandemic lockdown at the University of Zambia; a situation is sought in which individuals have first-hand experiences that they can describe as actually taking place in their lives. The aim is to capture as closely as possible how the phenomenon is experienced within the context in which the experience occurs (Giorgi & Giorgi, 2003). At the heart of phenomenology is the aim of insightful understanding and description of the phenomena of human experience (Giorgi 2005).

With phenomenology research design, therefore, the researcher could tap into students' experiences regarding online learning by bracketing or applying the principle of epoché (setting aside assumptions and beliefs), his own experiences, thereby taking the information as it came from participants through verbatim reporting. Since the study focused on students' experiences with online learning at UNZA, the design appropriately guided the generation of interpreted information about online learning and students' shared experiences. Therefore, the study was purely qualitative and took the form of a case of the University of Zambia.

This approach was appropriate for this study because it sought information on students' experiences with online learning at UNZA during the COVID-19 lockdown.

3.3 Target Population.

A population is a group of individuals, objects or items from which samples are taken for measurement; for example, a population of students (Kasonde-Ng'andu, 2013). The population of this study comprised of all undergraduate students at the University of Zambia; who experienced online learning during during COVID-19 lockdown period. Due to limited access to university records, the exact population size is unknown. However, it encompassed all undergraduates students who participated in online learning during the COVID-19 lockdown.

3.3.1 Sample size

Kothari (2011) indicates that sample size refers to the number of participants selected from the population with common characteristics, know-how and accessibility to help in the study under investigation. However, Cohen et al. (2018) explains that in a qualitative study, a small sample size suffices as long as it is representative to the population. Even though in qualitative studies it is left to the whims of an individual researcher to determine the sample size. It is ultimately a matter of judgment and experience on the part of the researcher, and researchers need to evaluate the quality of the information collected in light of the uses to which it will be applied. Therefore, the researcher used his judgment to determine the sample size in this study. Furthermore, Cohen, Manion and Marrison (2000) explain that in a qualitative study, a small number of sample size suffices for example 6 participants.

A sample of 20 participants was selected using purposive sampling to ensure they had direct experience with online learning at UNZA during the COVID-19 lockdown. It was from that population where the 20 students (12 females and 8 males) were obtained, yet making these students the rightful group to gather information from. A sample size of 20 participants was deemed appropriate for this qualitative study to achieve data saturation and provide in-depth insights into the students' experiences. Participants were recruited through departmental contacts. Inclusion criteria included: being an undergraduate students at UNZA during the COVID-19 lockdown, having participated in online learning and willingness to participate in the focus group discussions.

3.3.2 Sampling techniques.

Sampling techniques are classified into non-probability and probability. However, this study applied non-probability sampling technique because it is qualitative and with the intention of selecting individual participants for the study (Msabila and Nalaila, 2013). Non-probability

sampling is a sampling technique where the samples are gathered in a process that does not give all the individuals in the population equal chances of being selected. The study employed purposive sampling, which involves purposely handpicking individuals from the population based on the researcher's knowledge and judgment (Msabila and Nalaila, 2013). However, to be specific, the study used typical case sampling among other types of purposive sampling because the study sample of twenty students who were involved was picked from the population of undergraduate students who were potentially familiar with online learning during COVID-19 pandemic lockdown. Orodho and Kombo (2002) state that the power of purposive sampling lies in selecting information rich in cases for in-depth analysis related to the central issues being studied.

Black (1999) observes that purposive sampling ensures that those people who are unsuitable for the sampling study are already eliminated, so only the most suitable candidates remain. This means that the results of purposive sampling are usually expected to be more accurate than those achieved with an alternative form of sampling (Orodho and Kombo, 2002).

3.4 Research Instruments

Research instruments refer to the tools the researcher uses to collect the necessary data (Kasonde-Ng'andu, 2013). Given this, the researcher used a focus group discussion guide (Appendix No. III) to collect data from the respondents.

3.4.1 Focus Group Discussion Guide (FGDG)

Simpson and Wood (2004) state that focus group discussion is a technique where a researcher assembles a group of individuals to discuss a specific topic, aiming to draw from the participants' complex personal experiences, beliefs, perceptions and attitudes through a moderated interaction. A focus group usually comprises six to eight individuals who share specific relevant characteristics

for the study (Kasonde-Ng'andu,2013). The study employed a focus group discussion guide that made participants feel comfortable expressing their opinions. The presence of their peers created a natural environment, which enabled them to express themselves freely.

The focus group discussion questions were prepared to get more detailed information and understanding of the students' experience, benefits and challenges of online learning during the COVID-19 pandemic lockdown (Appendix II). The researcher organised and facilitated the discussion to ensure that the information focused on the topic of study. The discussion groups comprised two groups of 6 students each namely: FGD A, FGD B and one group of 8 students FGD C. The researcher facilitated the discussion to ensure that the discussion focused on the topic. The researcher wrote down all the responses from the respondents during the group discussion.

3.6 Data Collection Procedure

Data collection is the gathering of specific information to prove and refute some facts on how a researcher collects data and with what instruments (Kasonde-Ng'andu, 2013). In following the data collection procedure, clearance and introductory letters were sought from the University of Zambia's ethical committee and the Department of Educational Psychology, Sociology, and Special Education to allow the researcher to go for data collection. At the department level, verbal permission was obtained from the heads of various departments, lecturers and students of respective schools to use their facilities before data collection. After the researcher was permitted to go ahead with data collection by the respective heads of departments (Electrical Engineering, Social work, Social Work, Sociology and Psychology and Educational Psychology, Sociology and Special Education), and students, he then went on to administer focus group consisting of two groups of eight and one group made of six participants, which lasted for 60 minutes.

The issues of anonymity and confidentiality were ensured by not allowing participants to write their names on focus group discussion guides. This helped participants be honest and frank in how they responded to the questions. The participants felt more secure with this approach to data collection.

However, before collecting data from the participants, the aim of the study was thoroughly explained to them, and they were assured that the data would be used purely for academic purposes. During data collection, a voice recorder was used to record the conversations to capture the opinions and views of the participants in order to help the researcher with data analysis.

3.5 Data Quality Assurance (DQA)

Positivists often question the trustworthiness of qualitative research because their concepts of validity and reliability cannot be addressed similarly in naturalistic work. Nevertheless, several writers on research methods, notably Silverman (2001), have demonstrated how qualitative researchers can incorporate measures that deal with these issues, and investigators such as Pitts (1994) have attempted to respond directly to the issues of validity and reliability in their qualitative studies. Many naturalistic investigators have, however, preferred to use different terminology to distance themselves from the positivist paradigm. One such author is Guba (2009), who proposes four criteria that he believes should be considered by qualitative researchers in pursuit of a trustworthy study: credibility, transferability, dependability and confirmability.

Credibility is one of the critical criteria addressed by positivist researchers. Internal validity is one of the criteria in which they seek to ensure that their study measures or tests what is intended. According to Merriam (1998: 4), the qualitative investigator's equivalent concept, i.e. credibility, deals with the question, "How congruent are the findings with reality?" Korstjens and Moser (2018:121) state that many strategies can be used to achieve credibility in qualitative research. These

strategies include triangulation, member checking, peer examination, and interview techniques. In this study, however triangulation was not used as data was solely collected through focus group discussion from participants, the findings were based on the on the shared perspectives of the participants within the those groups. These perspectives may not fully represent the views of individuals who did not participates, and lack of corroboration with other data sources such as interviews, semi-structured interviews and observations. Therefore, future studies could benefit from employing triangulation by combining qualitative methods such as interviews and other instruments for more comprehensive understanding of students experiences about online learning at UNZA during COVID-19 pandemic lockdown.

Credibility was enhanced through tactics to help ensure honesty in informants when contributing data. In particular, each person who was approached was allowed to refuse to participate in the project to ensure that the data collection sessions involved only those who were genuinely willing to take part and prepared to offer data freely. Participants were encouraged to be frank from the outset of each session, with the researcher aiming to establish a rapport in the opening moments and indicating no correct answers to the questions.

Transferability was ensured through contextualising with other studies in which similar information was found and new information was added to the body of knowledge; hence, data credibility was assured. Merriam (2010:89) writes that external validity “concerns the extent to which the findings of one study can be applied to other situations.”

In addressing the dependability issue, reliable research instruments are employed by conducting Expert views or Member checks. Conformability was used through” Bracketing” or “Epoch”, taking the information as it came from participants through verbatim reporting (Guba and Lincoln,

2005). Member check was the most critical technique for establishing credibility (Guba and Lincoln, 2009). Member check was achieved by sharing all the findings with the participants involved at the end.

3.7 Data Analysis

Kombo and Tromp (2006) data analysis means examining what has been collected in the field and making deductions and inferences. It involves uncovering underlying structures, extracting important variables, detecting anomalies, and testing underlying assumptions. It involves scrutinising the acquired information and making inferences.

In this study, the qualitative data collected was analysed thematically. Thematic analysis generates themes that capture a phenomenon and are then explained (Daly, Ryan & Bernard, 2000). It is a method used to identify, analyse and report themes within data (Braun 54 & Clarke, 2006). This applies to this study as the aim is to draw out themes of helpful and unhelpful factors and then move on to interpret why these were helpful and unhelpful. The subjective responses from the focus group discussion were grouped into themes and were analysed according to emerging themes. From the information given by the respondents, the researcher identified major themes and subthemes with the view to gaining deeper insights into the subject matter.

Braun and Clarke (2006) identified a six-step approach to doing thematic analysis. They noted that the steps could be approached sparingly as the researcher may need to move back and forth between the stages. The following are the six steps for thematic analysis:

1. Familiarisation with the data: This phase involved reading and re-reading the data to become intimately familiar with its content.

2. Coding: This phase involved generating succinct labels (codes) that identify critical features of the data that might be relevant to answering the research question. It involved coding the entire dataset and, after that, collating all the codes and all relevant data extracts together for later stages of analysis.
3. Searching for themes: This phase involved examining the codes and collating data to identify significant broader patterns of meaning (potential themes). It then involved collating data relevant to each candidate theme so that the researcher could work with the data and review the viability of each candidate theme.
4. Reviewing themes: This phase involved checking the candidate themes against the dataset to determine whether they show a convincing data story and answer the research question. In this phase, themes are typically refined, which sometimes involves them being split, combined, or discarded.
5. Defining and naming themes: This phase involved developing a detailed analysis of each theme, working out the scope and focus of each theme, and determining the ‘story’ of each. It also involves deciding on an informative name for each theme.
6. Writing up: This final phase involved putting together the analytic, narrative and data extracts and contextualising the analysis of existing literature.

3.8 Ethical Considerations

The researcher sought ethical clearance from the University of Zambia Ethics Committee and the Department of Educational Psychology, Sociology and Special Education. Before focus group discussions, the researcher explained the aim of the research to the participants. This was then followed by the release of the letter explaining the purpose of the study and the forms for the informed consent to the participants. After the respondents signed the informed consent forms, the

researcher assured them of confidentiality for the information provided and that they would remain anonymous and untraceable in the research.

3.9 Summary of the Chapter

The chapter gave a summary of the methodology that was used in this study. The methodology includes the research design, target population, sample size and sampling techniques, research instruments, data collection procedure, data analysis and ethical clearance. In the next chapter, the findings of the study are presented.

CHAPTER FOUR: PRESENTATION OF RESEARCH FINDINGS

4.1 Overview

The previous chapter outlined the methodology employed by the researcher to come up with data through the stated research instruments. This chapter presents the findings of the study as provided by the participants. The findings are presented according to the study questions. The study questions were as follows:

1. What are the experiences students had about online learning during COVID-19 pandemic lockdown at the University of Zambia?
2. What are the benefits of online learning in time of COVID-19 pandemic lockdown at the University of Zambia?
3. What challenges did students face when using online learning during COVID-19 pandemic lockdown at the University of Zambia?

4.2 The experiences of students about online learning during COVID-19 pandemic

The researcher interacted with the participants through focus group discussions to appreciate their personal experiences concerning online learning during the COVID-19 pandemic lockdown at the University of Zambia. The first question sought to find out students' experiences with regards to online learning during the COVID-19 pandemic lockdown. There were positive experiences and negatives experiences which the students had during online learning during COVID-19 pandemic lockdown.

Positive experiences

4.2.1 Flexibility Nature of Online Learning

The participants identified online learning as flexible. The study revealed that online learning was flexible because participant could use devices, such as a laptop or mobile phone to learn anywhere, provided they were connected to the internet. The study further revealed that using portable devices was another aspect that made online learning flexible, as they could learn in any location, was contrary to face-to-face where learning take place in classroom. This was emphasised by a participant who stated the following:

I have seen a few people use their phones to learn while travelling; they can do it on their way home from school or work, and it just takes up less time to log in (Students 1,2022).

Another participant stated that:

Another aspect of the flexibility of online learning is that I was able to access lectures from the comfort of our home (Student 7, 2022).

The findings of the study, revealed that participants appreciated online learning because they were able to access more online materials from anywhere they were. Another aspect that came was that when they needed further explanations on something they might have missed, it was easier to seek clarifications. It was further established that students were appreciative of the promptness of feedbacks they received when they had concerns. Students also mentioned how convenient it was to access online courses from other avenues such as YouTube and other online tutorials, this reduced students dependence on the lectures.

4.2.2 Conduciveness of Online Learning

The study discovered that students experienced online learning as a conducive mode of learning. This is so, because its nature does not support the physical interactions and social interaction, which

makes it safer and conducive. The study further established that the University of Zambia's student population is so huge that many students would have caught COVID-19 if the institution had not closed during the pandemic and reverted to online learning. For example, what happened in 2018 when Cholera broke out, the university was closed and not much of online learning took place. Fortunately, during COVID-19 lockdown online learning was enforced this time around, therefore learning was not disrupted. One participant had this to say:

If there was not for this mode of learning, many of us would have lost out on learning, time to graduate, many lives would have been lost and a lot affected. You can imagine if we only depend on face-to-face, a lot was going to be missed, such as time for graduation, work to be covered, among others (Student 2, 2022).

Another participant stated that:

The spread of the pandemic was reduced because students' physical interaction and presences was eliminated completely. This was so because we were all learning away from our homes (Student 5, 2022).

The study findings from participants, indicate that students appreciated online learning, and they reported that it prevented the spread of COVID-19 because there was no physical interaction. This made online learning conducive and in line with the Ministry of Health's guidelines on the five golden rules of social and physical distancing of preventing the spread of COVID-19 in the country.

4.2.3 Anonymity Nature of Online Learning

Additionally, the study established that anonymity was a helpful factor which made shy students participate during learning. The findings emphasised that anonymity helped shy and passive students to be able to express themselves freely. The study revealed that online learning made most students feel more comfortable expressing their views than they felt in the classroom. Some feel shy, inferior, intimidated and uncomfortable in face-to-face classes, but when online, they feel free, comfortable and express themselves freely.

A participant stated that:

It is a lot easier to express myself more online, as I know I am not seeing and no one is looking at me, whereas face-to-face they physically sit with you, which makes it a lot more intimidating and a bit pressured (Student 8, 2022).

Another participant emphasised that:

The fact that it was not face-to-face gave me more confidence to express myself. There was not a face that I could see. If there was a face opposite me, I would not be feeling comfortable (Student 20, 2022).

The study findings established that lack of physical presence of others made some students feel less judged by their colleagues, which resulted in them being able to express themselves more. The impact of this meant that they were not holding on during discussions and contributions, but instead participated freely. Therefore, they were more open to expressing themselves during online learning than they would, in a physical classroom.

Negative experiences

4.2.4 Unequal access to online learning

The study further revealed that blind students experienced discrimination and unequal access to education because most of the materials that were being broadcasted did not cater for them. It was established that most of the online learning materials that were used did not take into consideration of these disabilities for example the blind students, despite their innumerable statistics in Zambia. This, therefore, meant that there was discrimination against this section of students in providing education during COVID-19 in Zambia to all learners, which is against the constitution and international conventions Zambia to which subscribes to.

One of the participants with a disability said:

Online learning did not take into consideration us students with disability, starting from pre-grade to university level. For example, all the broadcasted materials on televisions or radios did not account for the visually impaired, deaf or dumb persons. This was tantamount to education discrimination against learners and students with disability (Student 4,2022).

Another participant said that:

As a blind student, online was simply a nightmare because I could not do anything on my own; I had to pay someone to get my learning materials, downloading applications to help me which cost a lot or gadgets that could do a good job were unaffordable (Student 6, 2022).

The study established that online learning posed challenges for students with disabilities. Access to online materials, resources, and support services was limited to abled students, impacting negatively their learning experience during COVID-19.

4.2.5 Limited Social Interaction

The study revealed that students experienced loneliness during online learning because each student was on his/ her at home without the presences their peers, which is a different scenario in a face-to-face learning environment. The interaction on campus was all gone, this led to students experiencing loneliness and isolated. One participant reported the following:

I felt out of this world; I missed my friends and lecturers. The UNZA vibe and the environment is so good for studies. Whereas in my village, it is tough to interact and discuss school work because most of my peers are either Grade 7, 9 or Grade 12 dropouts, therefore, it was impossible to enjoy my studies. Life on campus is very interactive, and easier to consult from lecturers and fellow students, during lockdown it difficult (Student 16, 2022).

Another participant stated following:

Online learning made us feel isolated because all of us were not able to see each other, physically and socially a part of life which is so important for learning (Student 11, 2022).

The study found that online learning made students experience isolation, as they missed face-to-face learning, physical and social interaction. The absence of peer interactions,

group discussions, and in-person instructor support impacted students' motivation, engagement, and overall learning experience.

4.2.6 Digital divide

The study discovered that students from rural areas had many challenges in accessing the internet and online materials compared to their urban counterparts. This meant that students from rural and remote parts of the country could not access the needed help and access to internet. One participant stated that:

Where I stay, there is no internet at all, to access the internet I needed to travel to the nearest town, which is about 150 km from home, so this made online learning unaffordable to me (Student 16,2022).

Another participant said:

I come from Shangombo, and the internet is terrible and unstable, so I needed to go to Senanga for stable internet. So, we from rural areas were disadvantaged big time (Student 12,2022).

4.3 The benefits of online learning in time of COVID-19 pandemic lockdown

The second question sought to find out from participants what the benefits of online learning were during COVID-19 pandemic lockdown at the University of Zambia.

4.3.1 Acquisition of New skills (Technological Skills)

The participants revealed that they benefited from online learning because they became more computer literate and improved each day that came by. At the end of the year, they could do things such as log out, ask questions, raise a hand using applications and other things required during online learning. For example, if a specific lecturer chose Astria, Zoom, Google Meet or YouTube, they could use, join or access the materials with less challenges.

One student stated:

For me, I was confused the moment the government announced that the learning institutions were closing in the country, and students would continue learning through online. When we started learning, it was hard, but I got used to it and improved as days went by. The introduction of online learning has improved my computer skills as I am able to use different applications and platforms to learn without much problems (Student 7,2022).

Another participant added that:

As for me, my research skills improved because I was forced to look for information on the internet, YouTube and other fora. Not only did I improve my researching skills, but my creativity and innovation skills improved as I had to learn how to create my notes (Student 4, 2022).

The study discovered that online learning during the pandemic helped students develop essential digital skills. They became proficient in using online platforms, collaborating virtually, and navigating digital tools and resources. These skills are valuable and needed in today's increasingly digital world.

4.3.2 Availability of Additional Resources

The participants found online learning helpful because they could use the internet to search for more information on the topic of discussion to help further them understand. They stated that if they were unsure or did not understand what was being learned, they searched for additional data on the internet to supplement what was discussed/learned at that particular moment and have a better understanding on their own. Many participants stated that platforms such as YouTube, Academia and ResearchGate were highly utilised to get more information.

One participant had this to say:

If I did not understand or not sure of something, I just looked for it on the internet. The beauty of the internet is that you always get the latest information, other people's work and latest books (Student 19,2022).

Another participant Said that:

I used to watch a lot of YouTube videos which helped me understand the concepts. I played the videos and listen to them in my spare time until the concept is understood (Student 17, 2022).

The participants found online learning vital and beneficial because they could quickly go to different websites and look for additional materials on the topic of the day. Having these different resources readily available was beneficial for students as it provided them with opportunities to seek extra information via different avenues.

4.3.3 The Availability of Recorded Lectures

From twenty participants who took part in the study, the majority of the participants were agreeable that online materials benefited them because they were accessible. The study discovered that students accessed recorded lectures, and these lessons were recorded and uploaded on fora, kept in gadgets or other platforms. One participant stated that:

If one missed a class due to poor internet connectivity, load shedding or otherwise, he/she could still get recorded lectures from friends or download them (Student 14,2022).

Another participant stated that:

Sometimes, we never had live conferencing, but other lecturers recorded either videos, audios or voice notes and then sent them in our WhatsApp groups. In cases where one could have missed lesson for other reasons, recorded lessons were quickly found from friends or lecturers. As a result of that, little was missed (Student 10,2022).

One participant stated that:

Online learning provided us access to a vast array of educational resources such as digital textbooks, multimedia materials, educational websites, and online libraries. We explored different sources of information, moreover, it enhanced our learning experience (Student 13, 2022).

The study discovered that online learning proved to be a good thing and beneficial in times of disaster as it helped students get the resources they needed at the click of a button.

4.3.4 Increased savings

Additionally, the study revealed that day scholars saved money because they did not have to travel to the university. The study findings showed that boarders saved much money because they did not have to buy food and other necessities that were needed for their upkeep in the university.

One participant stated that:

The moment we switched to online learning, I saved money because I no longer spent on transport to and from the university, as well as on food (Student 8, 2022).

Another participant said that:

My parents did not have to pay for my accommodation and food, this meant that they had enough money for other things (Student 15, 2022).

4.4 Challenges students faced during online learning at the time of COVID-19 pandemic lockdown

The third question sought to find out challenges students faced during online learning. The findings that came from 3 FGDs comprised of 20 participants, brought up a number of challenges. Some of which were internet access, learning facilities and unaffordable data among others.

4.4.1 Poor Internet

Based on the results from the three FGDs the study revealed that one of the challenges faced by students with regard to online learning during the covid-19 pandemic was poor internet. Most of the participants conveyed the same thing that quality internet was one of the the main challenges they faced during lockdown. This was amplified by a participant who said that: *“The internet connection was pathetic, unstable and very slow.”*

One participant said the same thing *“My obstacle during online learning was the internet network.* Another participant further said that, *“most of students failed to join the lessons due to poor internet*

connectivity this was attributed to poor mobile networks in most remote and rural areas where some students come from.”

Another participant stated the following:

For me, it was hard to join these online lectures because where I come from mobile networks and internet is very bad; even though Zamtel services us, it is not good at all for online learning. So, in most cases, I used to depend on asking from friends who attended lectures to help me with recorded lessons; otherwise, I never learned anything (Student 6,2022).

From these arguments, it can be concluded that the challenges faced by students include difficulties in getting an internet connection for students who live in locations that have poor internet connections. The study further noted that internet services in the country is still bad yet the need to improve it by investing in ICT infrastructure to enhance online learning.

4.4.2 Lack of online learning facilities

The study findings revealed that lack of e-learning facilities was the most severe challenge faced by higher-education students during the COVID-19 pandemic at the University of Zambia. Several students pointed out that the lack of online learning facilities was a significant problem. Online learning facilities included computers, smartphones, power cuts and unstable internet.

One participant stated that:

Most of these gadgets for online learning are too expensive for students from disadvantaged families to afford. This fact made online learning a problematic venture for poor students (Student 7, 2022).

Another participant said that:

Certain facilities needed government intervention as it is not possible for an individual or university to deal with them, for example, poor internet and power cuts (Student 16, 2022).

Most of the participants complained that computers and gadgets that are used during online are so expensive and beyond most students' reach. Some participants interviewed confirmed that the lack of online learning facilities was a major academic challenge faced by students in higher education

during COVID-19. The availability of online learning facilities such as computers, Internet access, and constant power supply is essential for effectively utilising online learning since this mode of pedagogy is computer-based.

4.4.3 Limited number of students some platforms could accommodate

The study found out that some platforms (like free plan Zoom meetings) that many lecturers commonly used were limited to a certain number of students who could be accommodated; this meant that when a student delayed joining in due to either poor internet, then it meant that a particular student would miss the entire lesson for that day. Zoom meetings (free plan) are limited to only about a hundred students or participants at a time. One participant stated that:

In our case, we were about two hundred and fifty (250) students in one of the educational courses; it was difficult for all the students to attend a lecture in the beginning because it was too big for a free plan Zoom applicant to accommodate. Our lecturer did not seem to realise that free plan Zoom meeting could not accommodate such a number, this meant that this platform could accommodate one hundred (100) participants at a time. However, when the lecturer noticed that the class was split into three different classes, and everyone could be accommodated on the platform (Student 2, 2022).

Another student reported that:

Some applications are expensive to be download because they are not yet free, for example, some applications on iStore are not accessed for free, these applications could only be accessed by paying for them. This fact made online learning to be expensive for students (Student 3, 2022).

The study discovered that most of the applications being used were limited to a certain number of students who could be accommodated because they were either free plans or not paid for, for example, a free zoom meeting (Basic) . The study further found that most of the platforms could not run continuously for an hour. Instead, they could only go for 30 minutes and then restart again. Another discovery was that some applications were expensive to be accessed by students.

4.4.4 Unfordable data bundles

The study further revealed that data bundles were so expensive on the side of the students, as most, if not all, of the them, did not have any kind of formal employment where they could raise money for data bundles. For example, the data bundles that were required by the participants ranged from 3 GB to 10GB, with an average of 10.5GB per week. The participants, therefore, reported that they required an average of ZMW 150.00 per week to spend on Internet services, which they said it was expensive and unaffordable.

One participant stated that:

That the issue of data is a big problem in this pandemic period because all businesses were closed, and there were no sources of income (Student 13,2022).

One participant said:

The high cost of internet access and the poor quality of the internet speed are the biggest challenges that are hindering the successful implementation of online learning in Zambia (Student 18, 2022).

Additionally, the research revealed that the minimum data bundle a student was expected to have was about 2 Gigabytes (GB), depending on the number of lessons a student had per week and the maximum was 4 Gigabytes (GB). This meant that for a student to attend all the lessons in a week, she or he would need about K450.00, which was very expensive for an ordinary student.

4.4.5 Power cuts

The research further revealed that power cuts significantly affected online learning as it used to go for longer hours. This did not only cause learning disruption and stress to students, but power supply to gadgets was affected. One of the participants said that:

Power (electricity) in our district used to go off around 08:00hrs and normalise at around 17:00hrs, meaning that power used to be restored when lessons were

over.’ So, if one did not charge the phone or laptop, it meant that lessons would be missed (Student 14,2022).

One participant had this to say:

When the university closed due to COVID-19, that is the time when the country had power crisis and the region at large; power could go for about eight hours in most areas. In most cases, electricity went in the morning and be restored in the evening. This meant that most of the lessons were missed (Student 11, 2022).

The study discovered that during the outbreak of the COVID-19 pandemic, that was a time when most parts of Southern Africa were experiencing electricity crisis due to drought. This resulted into reduced water levels in Lake Kariba, the main source of hydroelectricity. Because of this fact, online learning was negatively affected, as electricity supply was minimized.

4.4.6 Unconducive home environment

The study found out that, since the students were learning from home, they were not spared from house chores; this meant that some students would log in and continue doing what they had been assigned to do at home by their guardians or parents. In short, there was cheating in attendance. This made the home environment unconducive for learning. One of the participants stated the following:

For me, my uncle used to send me to go and sell in his shop at the market. As you know, marketplaces are usually noisy and not conducive to learning, so it was impossible. As a result, I resorted to asking for recorded lessons rather than live sessions (Student 10,2022).

One participant stated the following:

The home environment was noisy during the COVID-19 pandemic because all the kids were also home. My siblings pupils from pre-school to grade 12 were all at home. This made the home environment unconducive for learning, it was noise all over the place (Student 10,2022).

The study found that some students did not favour learning at home because they said they were not spared from house chores. It was noticed that the home environment was said to be very noisy

as everyone else was home due to the pandemic. The study further discovered that homes became congested because some stayed in tiny homes with ten family members, making the home environment unconducive.

4.5 Summary of the chapter

This chapter presented the study findings in line with the study questions. The study found a number of experiences students had with regards to online learning during the COVID-19 pandemic lockdown at the University of Zambia.

Experiences of students about online learning included the following, but not limited to its flexibility, conduciveness, lack of social interaction, transitional challenges, lack of equity, and anonymity, among others.

The study revealed the following benefits: its conduciveness, increased interaction, availability of additional and recorded lessons, acquisition of new skills, reduced number of COVID-19 cases, and the sense of increased savings.

The study discovered challenges faced by students during online learning. These included poor internet connectivity across the country, unfordable data bundles, reduced interaction, load-shading, lack of know-how on online learning methodologies, an unconducive home environment and a limited number of participants some applications could accommodate.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.1 Overview

The previous chapter presented the findings of the study. The current chapter discusses the findings of the study. The discussion will be done under the following themes, which have been derived from the research objectives:

- i. To explore lived experiences students had about online learning during the COVID-19 pandemic lockdown at the University of Zambia.
- ii. To establish the benefits of online learning in times of COVID-19 pandemic lockdown at the University of Zambia.
- iii. To find out Challenges which students faced when using online learning during COVID-19 pandemic lockdown at the University of Zambia amidst.

5.2 The experiences students had about online learning during the COVID-19 pandemic lockdown at the University of Zambia

The findings of this study revealed that students had various experiences which were categorised as: positive experiences and negative experiences: positive experiences included: flexibility, conduciveness and anonymity and negative experiences: unequal access to online learning, lack of social interaction and digital divide.

Positive experiences

The study established that students appreciated online learning. It was very flexible because they could conduct and access lessons anywhere and anytime as long as they were connected to the Internet. Most of the students emphasised that they did not need to be on campus to learn, but were able to attend anywhere they were, provided they were connected to the Internet. This finding is in line with Cojocariu et al., 2014, who stated that online learning (open learning, web-based learning, computer-mediated learning, blended learning, m-learning.) have in common the ability to use a

computer connected to a network that offers the possibility to learn from anywhere, anytime, in any rhythm, with any means. The study further found that participants appreciated using portable devices, which was another aspect that made online learning flexible, as they could learn in any location. This finding is in tandem with Singh and Thurman, 2019, who stated that using different devices (e.g., mobile phones, laptops, and others) with Internet access made it easier for students to be anywhere (independently) to learn and interact with instructors and other students. From the preceding, students appreciated online learning because they could interact well with lecturers for as long as they were connected to the Internet. This fact made online learning easier because they only needed an Internet connection. Unfortunately, the scenario is different in Zambia, because Internet connectivity is not uniform. Some of the parts of the country are not yet connected to mobile networks/Internet, if online learning was to be efficient a lot needs to be done by the government; for example, investing in ICT infrastructure in rural areas. The connectivism theory states the importance of proper connectivity to the internet which provides individuals with direct access to reliable information from millions of sources to duplicate, reproduce, and share within their social networks, and to delete, critique, and discard inaccurate, irrelevant, and unreliable information.

The findings established that online learning created a conducive environment for students and broke down barriers that restricted individuals from an equitable education in the past. (Oswal & Meloncon, 2014) stated that in order to establish a learning environment conducive to all participants, the students' needs must be put first, for example, establishing courses that are accessible for all learners. (Oswal and Meloncon (2014, p. 276) further stated that, 'eleven per cent of undergraduates and eight per cent of graduate students reported having some form of disability.' Online learning, therefore, was the only way "some students could independently access courses and course materials, a powerful reminder of the need for accessible online distance education."

The study findings agreed with the aforementioned study because online learning, created a conducive environment for many students who would have lost out on learning, time to graduate and lose lives. The spread of the virus was also reduced the moment lockdown was enforced in the country as peoples' business transactions and learning were done online.

The study discovered that most students appreciated online learning because they found it a lot easier to express themselves online, as they felt anonymous. In contrast, face-to-face classrooms made it much more intimidating and pressured. This finding aligns with Suler (2004), who theorised that anonymity can permit more online expression as it makes individuals feel less vulnerable. Additionally, the absence of physical cues can reduce the sense of authority that others have, which makes online learning more accessible for students to share. These hypotheses were demonstrated in several studies with young people. King et al.'s (2006b) study stressed the value of anonymity for young people. The young people in the study suggested that the lack of physical contact online creates a less intimidating environment. It can be summarised that anonymity meant students were not holding on to discussions and contributions; instead, they were more open during online learning than in a physical classroom. It can be said most of the shy students found online learning to be an easier way of expressing themselves more, because they knew no one was seeing them or looking at them, whereas face-to-face they physically sit in a classroom, which makes it a lot more intimidating and a bit pressured. The fact that online learning is not face-to-face gives shy and passive students more confidence to express themselves. However, this finding contradicts with other studies that suggested that online learning contributed to some students feeling isolated and bored. The finding on this matter contradicted each other, it can be stated that online learning is a good platform for students who are shy to participate in face to face classroom, because they feel uncomfortable to contribute. Therefore, online learning offers a leveling platform for everyone to

express themselves. The theory state that connectivity is very important to facility online learning, this means that shy students will be able express themselves freely and they will be heard because the internet is stable. The shy students will be connected to various nodes, these nodes according to the theory are people, resources, or technologies, and they are linked together through the learner's own personal learning network

Negative experiences

The study discovered that there was unequal access to education between students with disability and abled ones. The study established that online learning did not consider students with disability at any level of learning. For example, none of the programs broadcasted on television or radio did account for visually impaired, deaf, or dumb persons. This finding agrees with Hapompwe, Kukano, and Siwale 2020, who postulated that there was no equity because Education. TV broadcasts and other online learning materials did not take into consideration learners with disabilities despite their innumerable statistics in Zambia. This, therefore, means that there was discrimination against this section of people in providing education during COVID-19 in Zambia, which is against the constitution and international conventions to which Zambia adheres to. This type of discrimination against learners and students with disability presented by online learning negatively impacted this group of people during COVID-19. It is safe to state that disabled students found it hard to cope with this abrupt shift mode of learning during this period. The implementation of online learning did not take into consideration students with disability, at all levels of learning (pre-grade to university level). For example, all the broadcasted materials both on televisions or radios did not account for the visually impaired, deaf or dumb persons, which is tantamount to education discrimination against students with disability. It is therefore, important to take into serious consideration certain policy or program inclusive to everyone before they implemented, so that no

one is left behind or denied access to their basic human rights regardless of their standing in society. However, this argument contradicts with Oswal and Meloncon, (2014) who stated that online learning established a learning environment conducive to all students. Therefore, there is need for more research to establish information on this subject beyond the current study's findings. Unfortunately, the theory does not speak of the material that is available online if they do consider the plights of the students with disability. This makes this theory bias because it does not speak to this section of the students, as it does not specify if the materials which were available on various platforms were helpful to these students too.

The study further revealed a massive lack of interaction between students and students and with lecturers. This finding agrees with McInnerney and Roberts (2004), who found that online education can lead to a sense of isolation, which can be detrimental to student success. Therefore, integrating social interaction into pedagogy for online learning is essential, especially when students do not actually know each other or have communication and collaboration skills (Garrison et al., 2010; Gašević et al., 2015). Unfortunately, existing evidence suggested that online learning delivery during the COVID-19 pandemic often lacked interactivity and collaborative experiences (Bączek et al., 2021; Yates et al., 2020). Bączek et al. (2021) found that around half of the medical students reported reduced interaction with teachers, and only 4% of students thought online learning classes were interactive. Likewise, Yates et al. (2020) study among high school students also revealed that over half of the students preferred in-class collaboration over online collaboration as they valued the immediate support and the proximity to teachers and peers from in-class interaction. This is true because students learn from their homes without their fellows and lecturers. This nature of learning does not support physical interaction amongst the students, making it challenging to see nonverbal cues and lack of socialisation. Other studies have indicated that they oppose this argument;

therefore, they need to do more research to investigate this phenomenon and come up with a concrete conclusion. In as much as the theory emphasis the important connectivity, this connectivity they theory is talking about is virtual connection, students feels the sense of isolation, because online learning does not allow for physical interaction which is very important in human development.

The study discovered a digital divide within Zambia was another challenge that students faced too; for example, students who come from urban areas have fewer problems accessing the internet than those who hailed from rural and remote areas. This resonates well with Dhawan (2020), who states that ensuring digital equity is crucial in this challenging time. Not all teachers and students can access digital devices, the Internet, and Wi-Fi. The unavailability of proper digital tools, internet connections, Wi-Fi connections can cause much trouble. The current study agrees with Molawa, (2009 and Dhawan (2020), who that digital divide in Zambia; there is a need for a call to address these issues by the government and cooperating partners. The successful implementation of ICT in Zambia's educational system requires reliable and adequate infrastructure. Infrastructure in the ICT sector is that which supports the installation and maintenance of ICT hardware, software and connectivity. This infrastructure includes internet, electricity and computer laboratories. However, ICT infrastructure in the country is still urban oriented thus creating a digital divide. According to the 2018 Educational Statistical Bulletin, only 4356 schools country wide have power from different sources and 5054 schools have no power making it a huge number of schools having no power thereby affecting the implementation of ICTs and access to internet service households increased from 12.7 percent reported in 2015 to 17.7 percent in 2018 (Zambia Information and Communication Authority, 2018). All these reports still indicate that ICT in Zambia is underdeveloped making it hard to effectively implement online learning in all sectors of education, which contradict with the theory's position.

5.2 The benefits of online learning during the COVID-19 pandemic at the University of Zambia

The study discovered that online learning during the pandemic helped students develop new digital skills. They became proficient in using online platforms, collaborating virtually, and navigating digital tools and resources. As skills are valuable and needed in today's increasingly digital world. The study findings further showed that by the end of 2020 academic year, most students had acquired digital skills such as: log out, ask questions, raise a hand using applications and other things required during online learning. Using technology more often in different scenarios enhances computer skills and provides a real-life platform for learning how to interact with others gracefully and professionally via virtual technology solutions, such as web/video conferencing applications, which is a norm in the hybrid workforce (Whenham, 2021). Smith (1989) further contended that computers in schools were used to enrich individuals with knowledge and skills to understand and improve on the techniques of research in order to survive in the technological world. Furthermore, the UNEB (2005) Ugandan report posited that equipping learners with ICT through computer knowledge and skills enables them to have access, process, analyse, interpret and disseminate information on their own through research. This helped students to gather relevant information which made them to be well informed and vested with the knowledge of how to solve research problems. This acquisition of new skills through online learning helped students to be knowledgeable of computers. This was because in the past years, it was difficult to search for information as such researchers used to spend more time to research and document a book or journal due to lack of sources and ways of processing information. This traditional way of research was too intensive and hectic. However, with the emerging of computers and online resources, more sources of information such as the internet and other facilities necessary for its delivery have been made

available thereby making research easier and faster coupled with the acquisition of long life and relevant skills. The study discovered that online learning during the pandemic helped students develop and acquire new digital skills. They became proficient in using online platforms, collaborating virtually, and navigating digital tools and resources. These skills are valuable and needed in today's increasingly digital world. This finding resonates well with the theory which guided the study because the theory emphasises the importance of being connected to different nodes, where a student can learn a lot of skills.

The study findings showed that they were plenty of additional resources available online. All the participants in the discussion group agreed that online learning presented a lot of resources which they accessed anytime. The participants further stated that they found it helpful to be able to use the internet to search for topics being discussed in their online session to further aid their understanding. Dhawan (2020), stated that there are plenty of online tools available which is important for an effective and efficient learning environment. Educators can use a combo of audio, videos, and text to reach out to their students in this time of crisis to maintain a human touch to their lectures. It can be said that online learning was vital and beneficial to students because they could quickly go to different websites and look for additional materials on the topic of the day. Having these different resources readily available was beneficial for students as it provided them with opportunities to seek extra information via different avenues. The theory also emphasises the importance of networks, connections, and the integration of new information and ideas into existing knowledge structures.

The study revealed that students saved money because they did not have to travel to be in a university. The findings showed that they saved much money because they did not have to buy food and other necessities that were needed for their upkeep in the university because they were at home where their parents provided for everything they needed. Rist (2022) stated that, online education

provides numerous benefits to learners, especially related to saving time and money. Students who participate in online or hybrid courses can save monetary resources in various associated categories, such as transportation, clothing, shoes, etc. Although all students can save time, and potentially money, regardless of whether they would normally drive or walk to class, commuter students would arguably save the most money on travel costs, depending on how far their commute might be. When they do not have to go to a physically classroom building on campus to participate in class sessions, commuter students who normally would have to pay more for transportation would likely save a measurable amount of money during a semester or over the course of a year. From the foregoing, it can be seen that the moment learning switched to online learning, most of the parents saved a lot of money because they were no longer spending on the upkeeps of their children in school on needs such as transport, groceries, foods and others. Furthermore, these parents did not pay for things like accommodation and other university expenses, this meant that they had enough money for other things.

The study findings showed that online learning was beneficial to students as they were able to access recorded lessons. This is in line with the theory on which the study was anchored because emphasises the importance of networks, connections, and the integration of new information and ideas into existing knowledge structures. Hegarty (2006), reported that students could access materials from a computer or mobile device. Quattrone et al. (2020) further stated that online archives of recorded teaching materials were made available for free. In most universities, materials were shared through WhatsApp groups and emails for students to access. For example, The University of Zambia shared the information via Unza student emails, Astria and WhatsApp groups. The study findings also established that, in cases when students did not have live conferencing, lecturers provided them recorded videos, audios and voice notes which were shared through various platforms such as WhatsApp groups, Astria, and emails. As a result of the recorded lectures, little was missed on the part students. Online learning if well harnessed in the country it could provide access to a vast array of educational resources such as digital textbooks, multimedia materials,

educational websites, and online libraries. Online learning proved to be a smarter way of content delivery, because, some lecturers could just record videos, audios or voice notes and then sent them in our WhatsApp groups. If for instance, one missed class for other reasons, recorded lessons were quickly found from friends or lecturers. As a result of that, little was missed.

The findings of the study revealed that the spread of COVID-19 amongst students reduced when learning was shifted to online learning. The study showed that, online learning was a safe alternative to in-person classes that require travel and physical proximity, because it helped maintain social distancing measures and reduces the spread of the virus not only amongst students but the general mass at large. This finding was in line with Ministry of Health (2020)'s guidelines on the five golden rules of social and physical distancing of preventing the spread of COVID-19 in the country. Online learning presented as a conducive mode of learning that helped curb the spread of COVID-19. This was so, because its nature does not support the physical and social interaction, which makes it safe and conducive for preventing the spread any type of a disease. When online learning was enforced, the spread of COVID-19 and the death rate in the country reduced. This was attributed to enforcement of social and physical distancing by both the Ministry of Health and the World Health Organisation. Although online learning was an alternative to face-to-face learning, it proved to be one of the most effective ways of reducing the spread of the pandemic amongst the university populous.

The study revealed that online learning promoted engagements and interactions between students and lectures. This agrees with Tomažević (2020), who revealed that online learning allows more students to engage and interact during lectures because of its anonymity. This is because today's online platforms allow students and teachers to use the microphone and type, which is positive news for students who tend to be shy and hesitant when talking in front of others. This is true in that most platforms used during learning had features like a microphone, video, and a space for typing messages. These features enhanced interaction. Contrary to these findings, existing evidence suggested that online learning delivery during the COVID-19 pandemic often lacked interactivity and collaborative experiences (Bączek et al., 2021; Yates et al., 2020).

5.3 Challenges faced by Students During Online Learning

The study findings also established that poor Internet connectivity in most parts of the country was another biggest concern the students had. The findings resonate well with Mukosa and Mweemba (2019), who stated that the quality of the internet in Zambia is also a massive challenge in delivering eLearning, especially since attitudes and cultural issues are still barriers that need to be broken down in order for eLearning to succeed ultimately. The study also revealed that Africa has received very little investment in ICT, which negatively impacts eLearning integration in learning institutions. Schurger et al. (2009) further added that for many School of Medicine students at Ridgeway, accessing the e-resources Library through the UNZA website was still a dream; internet connectivity for students at Ridgeway was unavailable. From the foregoing study, it can be deduced that poor Internet connectivity in Zambia and Africa is hampering the implementation of online learning in the country and Africa at large. The study findings indicated that the internet connectivity was very poor and unstable, making online learning a difficulty experience amongst the students. It can be concluded that some of the challenges faced by students during online learning pandemic were difficulties in getting an Internet connection for especially students who live in locations that have poor internet connections. It can further deduced that Internet services in the country is still bad yet the need to improve it by investing in ICT infrastructure to enhance online learning.

The study further revealed that power cuts significantly affected online learning as it used to go for longer hours. Power outages caused learning disruption, stress to students and power supply to gadgets as well. This finding was in line with Phiri's (2016) finding which revealed that the full implementation of ICT in schools still faces huge battles such as deficits in electricity supply due to load-shedding. Aduwa-Ogiegbaen and Iyamu (2005) argued that, the unstable and unreliable

electricity supply in Nigerian secondary schools compromised the smooth flow of ICT. This was viewed as a setback because whenever it happened, it provided the students with no option but to wait or ask from colleagues who might have not been load shedded. The situation was described as retrogressive because it retarded progress in terms of content coverage as power was a primary source for power to operate. Therefore, there is need for concerted efforts by the government and its cooperating partners to invest into other alternative of sources of energy such as solar, thermal and wind. The outbreak of the COVID-19 pandemic occurred at a time when most parts of Southern Africa was experiencing electricity crisis due to the drought, this resulted into reduced water levels in Lake Kariba, the main source of hydroelectricity. Because of this fact, online learning was negatively affected, but if the previous governments had invested in these alternative energies, instead hydro dependance, online learning was not going to be negatively hit.

The study's findings revealed that there was lack of ICT facilities that support online learning in the country; this means that access to Internet is one of the many challenges, especially in many parts of Africa. The underdeveloped areas of Zambia, as in other countries on the African continent, face challenges in accessing information, communication and technology due to poor infrastructure (Molawa, 2009). This finding is very factual as many parts of the country where students come from do not have the infrastructure to support online learning. In some instances, some places still need to have a network to support online learning. ICTs are important catalysts in the achievement of Sustainable Development Goals (SDGs) with specific focus on development goal number 4 which aims to ensure inclusive and equitable education and promotion of lifelong learning opportunities for all. ICTs in this SDG are necessary for achieving a sustainable education system that promotes the right skills for the labour force and entrepreneurship. Unfortunately, in Zambia ICT development is facing a lot of setbacks. Zambia's ICT uptake in the education sector is still facing

challenges and expected benefits are taking long to be achieved. The use of ICTs in learning institution to enhance learning, could help overcome some of the challenges faced during COVID-19 lockdown in order to improve the efficiency and productivity of both teaching and learning in Zambia, thereby narrowing the digital divide. It was discovered that some parts of the country, there is no Internet at all, to access it one needed to travel to the nearest town, which is about some good kilometres, so this made online learning unaffordable to some students.

The study found out that some platforms (free plan Zoom meetings or Basic and WhatsApp) that many lecturers commonly used were limited to a certain number of students who could be accommodated; this meant that when a student delayed joining in due to either poor internet or tripping internet, then it meant that a particular student would miss the entire lesson for that day. According Zoom's official site (2024) stated that, Zoom meetings (free plan or Basic) are limited to only about a hundred students or participants at a time, group meetings last for 40 minutes and lack premium features such as large meeting, webinar, audio conferencing and conferencing room connectors. WhatsApp application as well cannot be used for video calls or video calls for more than four people. The study discovered that most of the applications that were being used were limited to a certain number of students/participants and they could not last for an hour because they were either free plans or basic, for example, free zoom meetings and WhatsApp. The study further found that most of the platforms could not run continuously for an hour. Instead, they could only go for 30 minutes and then restart again. Another discovery was that some applications were expensive to be accessed by students.

On the other hand, the study findings indicated that one of the challenges students faced during online learning was the high cost of data bundles. This finding resonates with Chisadza (2020), who revealed that high data costs continue to be a contentious issue in Africa, where average incomes

are low. The findings of this study are supported by Gilbert (2019), who revealed that South Africa ranked 16th of the 45 countries researched in terms of the most expensive internet data in Africa, at 6.81 United States dollars (US\$6.81) per gigabyte in comparison to other Southern African countries such as Mozambique (US\$1.97), Zambia (US \$2.70), and Lesotho (US\$4.09). Internet data prices have also been questioned in South Africa after the Competition Commission published a Data Services Market Inquiry report calling the country's Internet data pricing "excessive". Konayuma (2015) and Mwiinga (2018) revealed that the cost of Internet access in Zambia remains one of the significant challenges in implementing eLearning in Zambia. As a result of the high cost of data bundles, most students had difficulties attending all online lessons in a week. This factor contributed to most students failing to sustain their online lessons attendance. This is true because the cost of data bundles is very high. This situation was like a double-edged sword in that even if one has data, the network becomes a challenge. The research further revealed that the minimum data bundle a student was expected to have was about 7 Gigabytes (GB), depending on the number of lessons a student had per week and the maximum was 17 Gigabytes (GB). This meant that for a student to attend all the lessons in a week, she or he would need about K702.00, which was very expensive for an ordinary student.

The study findings revealed that some students complained of the uncondusive learning environment at home. Students from prominent and low-income families mainly experienced this. eLearning Africa (2020) reported that for poorer students' the home environment was a particular problem for online learning. This is so because most students in many African countries live in tiny homes with many inhabitants. There is unlikely to be a quiet room or other space suitable for studying. This situation was experienced by students from densely populated homes and disadvantaged students. Some students complained of the work that their parent gave them during

lock down which they felt hindered most of the students concentrate on their school work. The study further indicated that, the only way they got information was by getting assistance from friends who might have attended online lectures. This meant that most of the students did not favour home environment as conducive for learning. It was again established that home environment was noisy during the COVID-19 pandemic because all the kids were also home. This made the home environment unconducive for learning. This study agreed with e-learning Africa (2020) that have stated that home environment is not good place for learning especially, if the number of people who live that particular home is huge.

The study adopted the connectivism theory advanced by George Siemens (2005). The theory suggests that, modern day learning occurs through network connections as individuals share their interests, knowledge, perspectives, expertise, and opinions online or virtual learning environments. The theory further posits that knowledge is not only acquired through traditional means such as textbooks or lectures but also through online communities, social media, and other technological platforms. The worldview seeks to go into the participants' frame of reference and values the participants' phenomenal world without any prejudgments and preconceived ideas of the phenomenon (Bazier,1991). The researcher operates on this worldview to construct the truth based on participants' views of the situation being studied (Crotty, 1998). This provides a concrete platform for participants to construct the meaning of a situation through experiences in a general and more open-ended method of questioning. This theory was valid and in line with the study because it helped gather information from the participants' points of view. This happened by ensuring that all prejudgments and assumptions were put aside and that only what was experienced and seen by the participants was gathered and reported in the study. The researcher made the questions general and open-ended to listen carefully to participants' minds and experiences. Therefore, it is safe to state that the theory approved what the study found because the main interest was to get what the participants' conscious minds experienced and recorded. The focus group discussions were used to pick what was seen in the consciousness of the participants. From this viewpoint, the experiences of students with regard to online learning during Covid-19 at Unza were appreciated in this study.

5.5 Summary of the Chapter

This chapter has presented a discussion of the findings presented in Chapter Four concerning the literature presented in Chapter Two. The chapter has also demonstrated how the findings fit into connectivism theory. The chapter has also highlighted the experiences, benefits and challenges students encountered concerning online learning during COVID-19. The next chapter presents the conclusions and recommendations of the study.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1 Overview

This chapter presents the summary, conclusion and recommendations of this research study about students' experiences about online learning during covid 19 pandemic at UNZA.

6.2 Summary of the study

The study investigated the experiences of students about online learning during COVID-19 pandemic lockdown at UNZA, Lusaka, Zambia and data was collected from students. The first objective sought to explore lived experiences of students with regards to online learning during COVID-19 pandemic lockdown at the University of Zambia. The study findings revealed that most of these students had both positive and negative experiences of online learning during the pandemic. Some of the notable positive experiences included: flexibility nature of online learning. The study established that students appreciated online learning because they were able to learn from anywhere at anytime, because of this nature it was considered flexible by most students. Literature still showed that online learning has in common the ability to use a computer connected to a network that offers the possibility to learn from anywhere, anytime, in any rhythm, with any means. The study further found that participants appreciated using portable devices, which was another aspect that made online learning flexible, as they could learn in any location.

The study findings further indicated that students appreciated online learning because it broke down barriers that restricted individuals from an equitable education in the past. Both disabled and able students were able to access education. Studies still showed that this type of learning created environment conducive to all participants, the students' needs must be put first, for example, establishing courses that are accessible for all learners. They are more additional advantages of online learning such as breaking down physical barriers to increase accessibility for individuals with

disabilities and special needs. “If students have a physical disability, they do not have to travel regularly from home to a college campus.”

The negative experiences that were established by the study included reduced social interaction, digital divide and inequity access, among others. Blind students who participated in the study expressed disaffection on the type of materials that were being used during online, as they felt sidelined. This fact made the education that was offered during the pandemic to be inaccessible to students with disability. Literature still postulated that there was no equity because Edu. TV broadcasts and other online learning materials did not take into consideration learners with disabilities despite their innumerable statistics in Zambia. This, therefore, means that there was discrimination against this section of people in providing education during COVID-19 in Zambia, which is against the constitution and international conventions to which Zambia subscribes. Although they are contracting, the finding of the study, it is important to note that complaints of disaffection that came from students based on their ability; for example, disabled students said that online was not equitable based on their needs while their counterparts appreciated it, therefore, there is need to do more research to appreciate how disabled students viewed online learning in line with their needs during the pandemic.

Additionally, study revealed that students were able to access recorded lessons from Astria, emails, WhatsApp, YouTube and other sources. This helped them to learn and study well without being left behind. More literature reported that students could access materials from a computer or mobile device and that online archives of recorded teaching materials were made available for free. In most universities, materials were shared through WhatsApp groups and emails for students to access. Other benefits of online learning included: availability on additional resources, increased savings and reduction in COVID-19 cases amongst students. It was further revealed that online learning was

very interactive, because it has all the tools needed for a lively and an interactive session this is due to advancement in technology. This is proof enough that online learning is a good thing and beneficial if well harnessed in the country especially in times of disaster and crisis.

The study established that one of the challenges that hampered the implementation of online learning in higher learning institution was that some applications that were used to conduct these conferences/lessons were free or basic apps; this meant that they could only accommodate a certain number of participants and could go only for 40 minutes. Zoom Free Plan Zoom meetings are limited to only about a hundred students or participants at a time, group meetings can only last for 40 minutes and they lack premium features such as large meeting, webinar, audio conferencing and conferencing room connectors.

It was further established that unaffordable data bundles made online learning a serious challenge to students in Zambia and Africa at large. Literature revealed that in South Africa ranked 16th of the 45 countries researched in terms of the most expensive internet data in Africa, at 6.81 United States dollars (US\$6.81) per gigabyte in comparison to other Southern African countries such as Mozambique (US\$1.97), Zambia (US \$2.70), and Lesotho (US\$4.09). Power cuts, unconducive home environment were some notable challenges that were encountered by students during COVID-19 pandemic lockdown.

6.3 Conclusion of the study

The findings of the indicated that most students who used online learning during the pandemic had different experiences which were either positive or negative. Some of the positive experiences the university of Zambia students mentioned included, but not limited to: flexibility nature of online, anonymity, conduciveness among other experiences. It can concluded that most of students

appreciated online learning because learning did not stop when the schools and universities were closed due to COVID-19 pandemic, but learning continued. For the shy students and passive, they found online learning to be a good thing because they participated freely. Anonymity nature of online learning made most students feel more comfortable in expressing their views than they felt in the classroom. Some feel shy, inferior, intimidated and uncomfortable in face-to-face classes, but when online, they feel free, comfortable and express themselves freely. Though a few students stated that there was need to improve on certain things such as ICT infrastructure in the country, the study findings indicated that most students were appreciative of the online learning because it provided an alternative to face-to-face especially during situations like natural disasters and crisis.

Some of the negative experiences that the study highlighted was an unequal access to education, as most of the materials that were being used during the pandemic did not cater for disabled students for example the blind. The study discovered that most of online learning materials that were used did not take into consideration students with disabilities despite their innumerable statistics in country. This, therefore, meant that there was discrimination against this section of students in providing education during COVID-19 in Zambia to all learners, which is against their fundamental right to education and as enshrined in the republican constitution.

The study discovered a number of benefits of online learning during the pandemic such as the ability of students to access recorded lessons, acquisition of new skills, availability of additional resources, high lecturer-student engagement and reduction of COVID-19 cases amongst the students populous. These benefits of online learning made it a wonderful platform of learning that should be embraced by everyone in the country and in this digital age. Most students stated that because of the various platforms from which they were able to access information and education materials, they felt they did not miss or lag behind in terms of learning. Apart from, the availability of online resources, that

students benefited, the study indicated that students acquired new skills that they never had before the onset of the pandemic, these students were made to learn certain skills which they did not have during face-to-face period, for example students acquired skills such as log in and out, ask questions, raise a hand, record the lecture and to do video conferences.

When it came to challenges the study revealed that poor internet connectivity was one of the major hindrance to online learning in most universities in the country. Most students complained of poor internet connection which made them either fail to join the lectures or fail to comprehend what was being discussed due to poor quality sound. These facts made online learning a nightmare to most students. With regards to poor internet connectivity in the country the study discovered the major contributor to this is lack of investment in ICT infrastructure and poor quality of current ICT infrastructure in the country.

The study established that one of the challenges that hampered the implementation of online learning in higher learning institutions was that most of the applications that were used to conduct these conferences/ lessons were free or basic apps; this meant that they could only accommodate a certain number of participants and only last for 40 minutes. This fact is attributed to the country has not invested in the innovation that promotes Zambians from coming up with the application that can be used in learning that are affordable and owned by Zambians, instead the study discovered that all the applications were not developed in Zambia by Zambians, therefore, these apps were foreign and did not meet the Zambian needs and culture.

Apart from the above challenges, the study discovered that data bundles were not affordable to most students as many were not in formal employment even if some were, still they could not manage because of the number of lessons they attended per week. The research revealed that the minimum

data bundle a student was expected to have was about 7 Gigabytes (GB) and the maximum of 17 Gigabytes (GB). This meant that for a student to attend all the lessons in a week, she or he would need about K702.00, which was very expensive for an ordinary student.

Power cuts was one of the challenges that the study discovered, during the time the pandemic, the country and southern Africa as a region was experiencing loadshedding which affected all aspects of life and the education sector was highly hit. Most students complained of prolonged hours of loadshedding which made most of them miss lectures. Despite this challenge, some students were from areas without power cuts and internet/network connection, the study discovered that some students come from places that have no power at, so for these students it was a double tragedy as they had to travel to areas which had power which was not available and places with network for internet connection.

6.4 Recommendations

Based on the suggestions of the respondents of the study, the following recommendations were made regarding online learning during COVID-19 pandemic lockdown at UNZA.

1. There is need for government to improve internet connectivity and infrastructure in the country so as to minimise disruption during online learning. This can be done through collaborating with other organisations and governments by investing in ICT infrastructure across the country.
2. There is need for universities to provide students with at least training in appropriate ICT skills for online learning and new technology. This is vital because students will be equipped with necessary skills and knowledge for online learning.

3. There is need for government and universities to work hand in hand with the network service providers in the country to reduce on the cost of data bundles and accelerate the installation of network towers across the country. This can allow many students to be able to buy enough data bundles and access internet despite their places.
4. The government should work on reducing digital divide in the country. Digital divide is a concept which refers to uneven access and distribution of information and communication technologies in societies. Therefore, once there is even access and distribution of ICT in the country then all the challenges related to online learning will be minimised significantly.

6.5 Areas for further research.

This study investigated experiences of students about online learning platforms during covid 19 pandemic at the university of Zambia. However, further research could be done in the following areas:

1. Which mode of online learning is effective? Synchronised learning or asynchronised learning.
2. Investigate the impact of Covid 19 on visually impaired students in special schools.
3. Utilisation of e-learning platforms by lecturers during the COVID-19 pandemic in Zambia.

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APPENDICES

Appendix I: Consent Form

THE UNIVERSITY OF ZAMBIA

DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY, SOCIOLOGY AND SPECIAL
EDUCATION

CONSENT FORM

Dear sir/Madam,

REF: REQUEST FOR CONSENT TO BE A RESEARCH PARTICIPANT

I am a student at the University of Zambia doing a Master of Education Degree Programme in Sociology of Education. I am requesting for your consent to participate in my research on, '**The University of Zambia Students' Experiences about online learning During COVID-19 pandemic.**' This will help me come up with experiences of lecturers and students at the University of Zambia about online learning platforms during COVID-19 pandemic.

Be assured that the information you will share with me will be confidential and will only be used for academic purpose.

Yours faithfully,

.....

Takazo Liswaniso M-Researcher/Student.

Consent by participant

Having read the information concerning the research, I hereby voluntarily consent to participate in the research. I, however, reserve the right to end the interview at any time or choose not to answer particular questions if necessary.

Name:..... Signature/Date:.....

Appendix: II Focus Group Discussion Guide For Students

The University of Zambia

School of Education

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY, SOCIOLOGY AND SPECIAL EDUCATION.

I am a postgraduate student at the University of Zambia, pursuing a Master of Education Degree Programme in Sociology of Education. I am conducting a research entitled, '**The University of Zambia Students' Experiences about Online Learning during (Covid-19) Pandemic.**' Kindly feel free, open and be honest in your responses as all answers you give will be treated with utmost confidentiality.

1. Gender of the participant:
2. Age of the participant:
3. Home Town/Village.....
4. Year of study:
5. What type of lectures do you usually attend
6. Do you attend online lectures:.....
7. How are you finding online learning?.....
8. How much data do you need in terms of money in order to attend a lecture in an hour's time or a week?
9. How knowledgeable are your lecturers in conducting online learning?
10. What was your first impression about online learning?
11. What was your experience about online learning during covid 19?.....
12. According to you, was the attendance of your fellow students during online learning impressive
13. If yes or no, explain
14. Are these gadgets (phones, computers and tablets) affordable enough for every student to access or possess.....
15. If yes or no, explain.....
16. As an individual student do you have the following gadgets and facilities:
 - a. Computer.....

- b. smartphone.....
- c. Printer
- d. Internet connectivity
- e. Power (electricity).....
- f. Network.....

17. What were the benefits of online learning during covid 19 at the University of Zambia?

.....

.....

.....

.....

18. Are there any challenges that you faced during online learning at the time of covid 19 at UNZA?.....

19. If yes, mention and explain these challenges.

.....

.....

.....

.....

.....

20. How do you think online learning can be improved?

.....

.....

.....

Thank you so much for your time!

Appendix III: Approval Letter (DRGS)



THE UNIVERSITY OF ZAMBIA DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

Great East Road Campus | P.O. Box 32379 | Lusaka 10101 | Tel: +260-211-290 258/291 777
Fax: (+260)-211-290 258/253 952 | E-mail: director.drgrs@unza.zm | Website: www.unza.zm

APPROVAL OF STUDY

17th January, 2022

REF NO. HSSREC-2021-NOV-008

Takazo Liswaniso Matthews
The University of Zambia
School of Education
P.O. Box 32379
LUSAKA

Dear Mr. Liswaniso,

RE: "THE UNIVERSITY OF ZAMBIA LECTURERS' AND STUDENTS' EXPERIENCES ABOUT ONLINE LEARNING PLATFORMS DURING (COVID-19) PANDEMIC"

Reference is made to your submission of the protocol captioned above. The HSSREC resolved to approve this study and your participation as Principal Investigator for a period of one year.

REVIEW TYPE	ORDINARY REVIEW	APPROVAL NO. HSSREC-2021-NOV-008
Approval and Expiry Date	Approval Date: 17 th January, 2022	Expiry Date: 16 th January, 2023
Protocol Version and Date	Version - Nil	16 th January, 2023
Information Sheet, Consent Forms and Dates	• English.	To be provided
Consent form ID and Date	Version - Nil	To be provided
Recruitment Materials	Nil	Nil
Other Study Documents	Questionnaire.	
Number of Participants Approved for Study		

Specific conditions will apply to this approval. As Principal Investigator it is your responsibility to ensure that the contents of this letter are adhered to. If these are not adhered to, the approval may be suspended. Should the study be suspended, study sponsors and other regulatory authorities will be informed.

Conditions of Approval

- No participant may be involved in any study procedure prior to the study approval or after the expiration date.
- All unanticipated or Serious Adverse Events (SAEs) must be reported to HSSREC within 5 days.
- All protocol modifications must be approved by HSSREC prior to implementation unless they are intended to reduce risk (but must still be reported for approval). Modifications will include any change of investigator/s or site address.
- All protocol deviations must be reported to HSSREC within 5 working days.
- All recruitment materials must be approved by HSSREC prior to being used.
- Principal investigators are responsible for initiating Continuing Review proceedings. HSSREC will only approve a study for a period of 12 months.
- It is the responsibility of the PI to renew his/her ethics approval through a renewal application to HSSREC.
- Where the PI desires to extend the study after expiry of the study period, documents for study extension must be received by HSSREC at least 30 days before the expiry date. This is for the purpose of facilitating the review process. Documents received within 30 days after expiry will be labelled "late submissions" and will incur a penalty fee of K500.00. No study shall be renewed whose documents are submitted for renewal 30 days after expiry of the certificate.
- Every 6 (six) months a progress report form supplied by The University of Zambia Humanities and Social Sciences Research Ethics Committee as an IRB must be filled in and submitted to us. There is a penalty of K500.00 for failure to submit the report.
- When closing a project, the PI is responsible for notifying, in writing or using the Research Ethics and Management Online (REMO), both HSSREC and the National Health Research Authority (NHRA) when ethics certification is no longer required for a project.
- In order to close an approved study, a Closing Report must be submitted in writing or through the REMO system. A Closing Report should be filed when data collection has ended and the study team will no longer be using human participants or animals or secondary data or have any direct or indirect contact with the research participants or animals for the study.
- Filing a closing report (rather than just letting your approval lapse) is important as it assists HSSREC in efficiently tracking and reporting on projects. Note that some funding agencies and sponsors require a notice of closure from the IRB which had approved the study and can only be generated after the Closing Report has been filed.
- A reprint of this letter shall be done at a fee.

- All protocol modifications must be approved by HSSREC by way of an application for an amendment prior to implementation unless they are intended to reduce risk (but must still be reported for approval). Modifications will include any change of investigator/s or site address or methodology and methods. Many modifications entail minimal risk adjustments to a protocol and/or consent form and can be made on an Expedited basis (via the IRB Chair). Some examples are: format changes, correcting spelling errors, adding key personnel, minor changes to questionnaires, recruiting and changes, and so forth. Other, more substantive changes, especially those that may alter the risk-benefit ratio, may require Full Board review. In all cases, except where noted above regarding subject safety, any changes to any protocol document or procedure must first be approved by HSSREC before they can be implemented.

Should you have any questions regarding anything indicated in this letter, please do not hesitate to get in touch with us at the above indicated address.

On behalf of HSSREC, we would like to wish you all the success as you carry out your study.

Yours faithfully,



Dr. J. I. Ziwa

DR. J. I. Ziwa

**ACTING CHAIRPERSON
THE UNIVERSITY OF ZAMBIA HUMANITIES AND
SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE - IRB**

cc: Director, Directorate of Research and Graduate Studies
Assistant Director (Research), Directorate of Research and Graduate Studies
Assistant Registrar (Research), Directorate of Research and Graduate Studies