



**Exploration of Students perceptions and Experiences
of Online Learning at the
University of KwaZulu-Natal (Howard college).**

Thulile Xulu (217000597)

Submitted in fulfilment of the requirements of the degree
Master of Social Science in Psychology

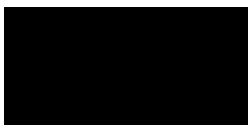
Supervisor:

Dr Mthokozisi Wellington Hlengwa

Declaration

I, **Thulile Xulu (217000597)**, declare that:

- i) The information in this dissertation is my original work. Where other ideas from other authors have been used, they are acknowledged and referenced properly.
- ii) This dissertation has not been submitted for any degree or examination at any other university.
- iii) This dissertation does not contain other persons' data, pictures or other information, unless specifically acknowledged as being sourced from other persons.
- iv) This dissertation does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers/students/persons. Where other written sources have been quoted, then:
 - a) Their words have been re-written, but the general information attributed to them has been referenced.
 - b) Where their exact words have been used, their writing has been placed inside quotation marks, and referenced.
- v) This report does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the report and in the References sections.



Signature

Date

Acknowledgements

I would like to express my gratitude to the following people:

- ❖ To My academic supervisor Dr Mthokozisi Wellington Hlengwa, thank you for guiding and supporting me throughout this journey,
- ❖ Without the support of my partner Mcebisi Mkhize, I would not have completed this. Your words of moral support and inspiration during those times when I felt like I could not do it meant a lot to me.
- ❖ My family, I want to thank you for letting me fulfil my dreams and for your financial and emotional support during this journey.
- ❖ To the university of KwaZulu-Natal thank you for allowing me to conduct this research.
- ❖ and lastly to my research participants, thank you for your participation in this research without you this research would not have been a success. May this research bring out positive change.

Dedication

This dissertation is dedicated to God who is alpha and omega in my life, who gave me this courage to conduct this research for he has good plans for my life.

And my late mother

“Babongile Mpathoni Xulu”

Table of Contents

| | |
|---|-----|
| Declaration..... | i |
| Acknowledgements | ii |
| Dedication | iii |
| Abstract..... | vii |
| CHAPTER ONE | 1 |
| 1.1. INTRODUCTION..... | 1 |
| 1.2. BACKGROUND OF THE STUDY | 1 |
| 1.3. Problem statement | 4 |
| 1.7. Aim of the study | 5 |
| 1.8. Objectives of the study..... | 5 |
| 1.9. Research questions | 6 |
| 1.10. Structure of the Thesis..... | 6 |
| 1.11. SUMMARY | 7 |
| CHAPTER TWO | 8 |
| 2.1. LITERATURE REVIEW | 8 |
| 2.1.1. INTRODUCTION..... | 8 |
| 2.1.2. Conceptualizing online learning | 10 |
| 2.1.3. HISTORY OF ONLINE LEARNING | 13 |
| 2.1.4. ONLINE LEARNING IN SOUTH AFRICA | 14 |
| 2.2. CATEGORIES OF ONLINE LEARNING | 15 |
| 2.2.1. ASYNCHRONOUS LEARNING | 15 |
| 2.2.2. SYNCHRONOUS ONLINE LEARNING | 16 |
| 2.3. TYPES OF ONLINE LEARNING | 17 |
| 2.3.1. FACILITATED ONLINE LEARNING..... | 17 |
| 2.3.2. SELF-PACED ONLINE LEARNING | 17 |
| 2.3.3. BLENDED ONLINE LEARNING | 17 |
| 2.5. ADVANTAGES OF ONLINE LEARNING | 18 |
| 2.6. THE CHALLENGES OF ONLINE LEARNING..... | 19 |
| 2.6.1. Network and data cost issues | 20 |
| 2.6.2. Loss of human interaction | 21 |
| 2.6.3. Home environment socio-economic status barrier..... | 23 |
| 2.6.4. Increased levels of anxiety | 24 |
| 2.6.5. Lowered self-motivation and Impacts on academic performance..... | 25 |
| 2.7. THEORETICAL FRAMEWORK | 27 |
| 2.7.1. CONSTRUCTIVISM LEARNING THEORY | 28 |

| | |
|---|-----------|
| 2.8. conclusion..... | 31 |
| CHAPTER THREE | 32 |
| 3.1. RESEARCH METHODOLOGY..... | 32 |
| 3.1.1. Introduction..... | 32 |
| 3.1.2. Research Methodology | 32 |
| 3.1.3. Research setting..... | 33 |
| 3.1.4. Sampling strategy..... | 33 |
| 3.1.6. Data collection | 34 |
| 3.2. Method of Data Analysis | 35 |
| 3.2.1. Thematic Analysis | 35 |
| 3.2.2. Critical reflexivity | 38 |
| 3.3. Ethical considerations..... | 40 |
| 3.4. Conclusion | 41 |
| CHAPTER 4..... | 42 |
| 4. RESEARCH FINDINGS..... | 42 |
| 4.1.1. INTRODUCTION..... | 42 |
| 4.1.2. DEMOGRAPHIC REPRESENTATION OF PARTICIPANTS..... | 42 |
| 4.2. Thematic results..... | 43 |
| 4.2. Transition to the university Environment | 44 |
| 4.3. Students experiences of Online learning..... | 46 |
| 4.4. Challenges of online learning experienced by students | 49 |
| 4.4.1. Network issues and technical issues..... | 49 |
| 4.4.2. Lack of learning devices | 52 |
| 4.4.3. Lack of understanding of how online learning works | 54 |
| 4.4.4. Lack of self-motivation and time constraints | 56 |
| 4.4.5. Loss of Human interaction..... | 58 |
| 4.4.5. Increased workload..... | 60 |
| 4.5. Impact of online learning on students' academic performance..... | 62 |
| 4.6. Benefits of online learning..... | 64 |
| 4.6.1. More flexibility | 64 |
| 4.7. Forms of support offered to students | 66 |
| 4.8. Coping strategies used by students to cope with online Learning..... | 68 |
| 4.9. Chapter summary | 71 |
| CHAPTER FIVE | 72 |
| 5. DISCUSSION..... | 72 |
| 5.1. Introduction..... | 72 |

| | |
|--|-----|
| 5.1.1. Learning Context in the University of KwaZulu-Natal | 72 |
| 5.1.2. Students experiences of online learning. | 74 |
| 5.1.3. Challenges of online learning experienced by students | 76 |
| 5.1.4. Lack of technological devices and technical issues..... | 76 |
| 5.1.5. Loss of human interaction..... | 79 |
| 5.1.6. Lack of motivation and time constraints | 80 |
| 5.1.7. Impact of online learning on academic performance | 81 |
| 5.1.8. Advantages of online learning..... | 82 |
| 5.1.9. Forms of support offered..... | 83 |
| 5.1.10. Coping strategies that students use to cope with online learning | 84 |
| 5.2. SUMMARY | 86 |
| CHAPTER SIX | 88 |
| 6. conclusion, Recommendations and Limitations of the study | 88 |
| 6.1. Introduction..... | 88 |
| 6.2. Recommendations of the study | 91 |
| 6.2.1 University of KwaZulu-Natal..... | 91 |
| 6.2.2 Future Research | 92 |
| 6.3. Study limitations | 93 |
| 6.4. Conclusion | 93 |
| 7. REFERENCES..... | 94 |
| 8. Appendices..... | 100 |
| 8.1. Appendix A: Informed consent form | 100 |
| 8.2. Appendix B: Letter to The Registrar | 102 |
| 8.3. Appendix C: Gatekeeper Letter | 104 |
| 8.4. Appendix D: Ethical Clearance | 105 |
| 8.5. Appendix E: Interview Schedule | 106 |

Abstract

Corona-virus pandemic commonly known as covid-19 had an impact on higher education system globally as a result emergency learning (Online learning) was introduced to avoid the disruption of academic lessons. Online learning required students and lecturers to carry out the teaching and learning process through online platforms such as zoom and other learning sites. Therefore, this study aimed at understanding how university of KwaZulu-Natal (Howard college campus) students perceived and experienced online learning. This study was a qualitative study and thematic analysis was used as form of data analysis. The study used eight participants who were university of KwaZulu-Natal students, and they were doing their first, second and third years across three colleges: College of Humanities, college of Law and management studies and college of agriculture engineering and science that are found within Howard college campus (UKZN). The results indicated that students had different perceptions and different experiences of online learning, as some students indicated that they had positive experience and perception of online learning whereas some perceived and experienced online learning negatively. Online learning offers flexibility, but it also presents various constraints such as Network issues, Lack of technological devices, Loss of human interaction. Some students were less motivated to participate in online learning as they prefer face to face interactions. In conclusion the key factors in conducting online learning are the availability supporting tools, stability of internet connection and access, and applications of online learning must be easy to access and use, they must also be motivating and in the form of combination among several online learning media to provide the best way in delivering and accepting the material during teaching learning process.

Key terms: online learning/e-learning, Flipped classroom, asynchronous and synchronous learning.

Definition of terms

Covid-19 (Corona virus): According to WHO (2020) covid-19 is a respiratory illness in humans that can produce severe symptoms and in some cases death especially in older people and those with underlying health conditions and this virus was originally identified in China in 2019, thereafter it was declared as a pandemic in 2020.

Online learning: is a wider method of learning that offers new prospects for learning and teaching in various fields of education, far from the offline classroom setting (Rodrigues et al., 2019). In short, online learning is an Internet-based learning process. Online learning is learning that takes place partially or entirely over the Internet. Online learning, also referred to as web-based learning and e-learning, is multi-faceted with a variety of instructional configurations and instructional methods

Synchronous online learning: synchronous online learning entails interaction between students and a facilitator at a predetermined time (Libasin et. al., 2021). For the asynchronous learning, pre-recorded lectures on learning content, videos, quizzes, and module assignments are uploaded online. The interactive discussions, and higher-order learning activities like problem-solving then occurs during the class as synchronous component.

Asynchronous online learning: Asynchronous learning allows students to work at their own pace and at a time that is convenient for them (Libasin et.at., 2021).

CHAPTER ONE

1.1. INTRODUCTION

This chapter outlined the background to the study, problem statement, and significance of the study, research questions, research aim and objectives. Additionally, the chapter sought to explore how university of KwaZulu-Natal students (Howard college campus) perceived and experienced online learning. Lastly, the chapter covered the definition of key concepts underpinning the study, the layout of the study and the conclusion or chapter summary.

1.2. BACKGROUND OF THE STUDY

COVID-19 has altered people's lifestyles across the planet and education is also covered by these security precautions. Since then, they have devised a phased online method for the beginning of the semester. After the first reported case of COVID-19 in Wuhan, China, higher education institutions throughout the world postponed the start of the year schools four times. For safety reasons institutions around the world chose to discontinue face-to-face instruction in favour of online learning (Wang et al., 2020). The new online learning environment is being adapted to in various ways by school administrators, teachers, and students. The COVID-19 (Corona Virus Disease) outbreak, which is currently shocking the world and is thought to have started in Wuhan, China, in December 2019, (Lee, 2020). Consequently, Corona virus outbreak in the year 2020 changed how the world functions, ultimately it forced the functioning's of the world to be virtual. The pandemic increased global adoption of technology. Higher education institutions were not left behind when the whole world was restructuring the way it functions, university institutions were forced to shift from traditional methods of teaching and learning to online learning.

In response to this, the South African President requested that, as a precaution measure all universities close on March 18, 2020, and find a way to give courses online (DHET, 2020). Due to the severity of inequalities in the South African environment, this demand aroused concerns about the viability of e-learning, notably in the School of Education in one of the universities in the province of KwaZulu-Natal. Mzangwa (2019) concurs with Bunting (2006) that since 1994, significant progress has been made in higher education to address historical disparities through changes to institutional policies and the National Plan for Higher Education (Ministry of Education, 2001). However, most of the formerly underprivileged

black South African students have not benefited from these reforms in terms of access to e-learning. The digital divide which is the difference between those who have access to computers and the Internet and those who do not, seems to be another significant problem restricting the viability of e-learning in a South African context (Van Deursen & van Dijk, 2019; Warschauer, 2002). Additionally, the latter studies claim that factors including socio economic status, race, social class, gender, age, location, and educational background affect the degree of the digital gap in a university setting. While access to computers and the Internet is prevalent in advanced colleges in Europe and the United States, African institutions particularly those in South Africa are still struggling due to the severity of the causes that contributed to the digital divide (Van Deursen and van Dijk, 2019). Universities provide students with free laptops and Wi-Fi (wireless network, which commonly enables technological devices to interface with the internet) access inside the university and residences as a result of research showing that various programs and policies have been developed and implemented to address this issue (Rodrigues et al., 2019; Schofield, 2007).

The digital gap, which prevents university students from accessing e-learning from home, has been the subject of little to no research in the South African setting. This study makes the case that the digital divide must be closed before e-learning while students are at home can be realized in a South African university setting. In recommending different routes for South African colleges to take to address the digital divide. This shift caused university students to rethink the way they perceive and experience learning and teaching practice. Cranefield et al., (2021) further argue that the pandemic and subsequent "lockdowns" had a significant impact on higher education institutions' educational sector. As stated, that the education system has recently been struck by an extraordinary health crisis which is COVID-19 outbreak, Barrot (2021) argue that this covid-19 outbreak shattered the education system foundation. As a result, governments all around the world have initiated a crisis response to offset the pandemic's negative impact on education. Curriculum adjustments, availability of technical resources and infrastructure, shifts in the academic calendar, and rules on instructional delivery and assessment are all examples of this approach.

These advancements pushed educational institutions to go to complete online learning until face-to-face instruction is permitted. Concurrently, Dwivedi et al., (2020) argue that global higher education is one of the sector going through a rapid digital revolution because of the reality of the new normal being disturbed by COVID effects. Due to the necessity to quickly transition to fully online learning environments, the sudden forced shutdown of face-to-face instruction has placed academics and students in "unfamiliar environment" (Carolan et al., 2020). Academics from all around the world have had to quickly transform materials and methodologies into a format that is appropriate for online delivery (Dwivedi et al., 2020). This change was rapid and forced by the situation. The outbreak compelled a period of international remote teaching experimentation, Krishnamurthy (2020) argue that higher education institutions must completely redesign their service to meet the new environment because current social distancing practices will continue for a while. Universities should create digital learning techniques and offer digital learning settings, resources, and support systems to create an effective online learning experience

Traditional universities had pedagogical options prior to COVID-19, including a variety of teaching delivery modes. Traditional higher education institutions suddenly found themselves with only one mode of delivery. All services were moved to digital platforms, resulting in "emergency eLearning." It is still unclear how this abrupt shift to digital platforms will affect all student cohorts. Furthermore, the degree of disruption varied depending on the country in which the University was located and the country's lockdown procedures. Moreover, Technology plays various roles in education, and these roles include being a tool that is used to rethink teaching practice (Shaheeda et al., 2006). Additionally, Wagner (2001) argues that technology also play a role in enhancing and improving the quality of teaching and learning. Over the past few decades, the use of technology has become evident in all spheres of life, with people of all ages accessing computers and the internet to interact and communicate daily (Louw & Hanmer, 2002).

Higher education has traditionally been delivered in a classroom format, with a lecturer delivering lectures and students listening and taking notes Within this setup, teacher-student interaction has been considered as an important learning factor. Innovations in distribution mechanisms, on the other hand, have shifted this paradigm (Shaheeda et al., 2006), and technological advancements are allowing previously underutilized delivery modes, such as online learning, to resurface (O'Malley & McCraw, 1999).

Full-time online learning, according to Yan et al. (2021), could last longer than expected for most students (World Health Organization, 2020). Even after the pandemic, the current widespread adoption of online learning could have long-term consequences for the global education system, accelerating and expanding the rapid growth of virtual schools on a global scale (Molnar et al., 2019). As a result, it is critical to understand students' learning environments and online learning experiences during the outbreak. Students' online learning experiences during the pandemic have revealed several major concerns, including internet connection issues, and limited collaborative learning opportunities (Bczek et al., 2021). Additionally, Gonzales et al., (2020) argue that the current situation is unusual in that it has the potential for difficulties that students will encounter during online learning as a result of the pandemic restrictions.

Given the current situation, it is critical to acquire a more understanding of students' online learning experiences during the COVID-19 pandemic. The University of KwaZulu-Natal (Howard College campus) accepts students from different social and cultural backgrounds. Hence, it is challenging to respond to their concerns about learning and university life in general. As a result, it is crucial to look into their experiences with online learning at the University of KwaZulu-Natal.

1.3. Problem statement

The shift from face-to-face instruction to online learning is one of the largest shifts in the educational system. As a result, online learning is fast becoming the main mode of teaching and learning in universities ever since the outbreak of the coronavirus. However, the challenge lies in identifying and conceptualising ways that online learning can usefully contribute to student learning experiences (Shaheeda et al., 2006). The South African government has identified the use of technology for teaching and learning as an important priority. As with the rest of the world, higher education in South Africa is under pressure to increase participation from diverse groups of students and to produce the skills required for a rapidly changing society. It is in this educational context that new opportunities for online learning have arisen. Just as the demand for online learning opportunities has increased, the complexity of providing this type of education has also grown. Online learning is fast

becoming a tool to train soft skills in South Africa (Deller, 2010) and given the growing importance of self-managed learning, it is becoming an area of increasing research interest.

Universities have seen a significant shift to online learning as a direct result of the social isolation measures enforced by Covid-19 and to sustain service during times of emergency (Krishnamurthy, 2020). Universities had to quickly adjust to online education due to this unexpected transition, using the existing technology resources and lecturers who did not have the necessary technological skills. After COVID-19, transforming higher education, in a setting of digital transformation, disruptive technology innovation, and accelerated change in the educational framework, the university system must be able to deliver high-quality education. In the course of this adaptation, various impediments and difficulties did arise (Marinoni et al., 2020). Universities must be aware of these potential barriers and set up suitable methods to overcome them in order to facilitate safe transition and accomplish effective transformation.

As online learning is a new way of teaching and learning, limited research has been conducted on students' experiences (Barrot et al., 2021). There is little research that has been conducted in this field at the University of KwaZulu-Natal, therefore this study is aiming to fill the gap. Determining the current perspectives of students regarding teacher-student interactions in their online courses will provide vital information about where educators need to direct their focus when developing or revising courses (Biausutti et al., 2022). Evaluating the experiences of students as participants of this teaching and learning methodology is thus limited, this study therefore aims to investigate and explore university student's experiences and perceptions of online learning at the university of KwaZulu-Natal (Howard college campus).

1.7. Aim of the study

The aim of the study is to get better understanding on how University of KwaZulu-Natal students perceive and experience online learning.

1.8. Objectives of the study

- To explore the experiences of university students of online learning at the university of KwaZulu-Natal.

- To understand the experience of the transition of students from traditional mode of teaching and learning (Contact learning) to online learning at the university of KwaZulu-Natal.
- To investigate the benefits and challenges of online learning experienced by university students.

1.9. Research questions

- What are the experiences of university students of online learning?
- How is the experience of the transition from traditional method of teaching and learning to online learning?
- What are the challenges and benefits of online learning?

1.10. Structure of the Thesis

This study is divided into six chapters to achieve the stated objectives of the study:

Chapter 1: Introduction. The broad study background, the problem statement, the research question, and the chapter's objectives make up the chapter.

Chapter 2: Literature Review. This chapter discussed the general literature on Online learning, challenges and benefits of online learning, history of online learning and different types of online learning. This chapter also constitutes of the conceptual/theoretical framework that supports the study.

Chapter 3: Research Methodology and Design. This chapter outlined qualitative research, the selection of participants, and data generation and analysis and ethical considerations.

Chapter 4: Findings. Research findings were presented in this chapter. The presentation and discussion of the findings was covered, whilst highlighting the themes of the study by answering the research questions.

Chapter 5: Data discussion, this chapter entail the data discussion or research findings whilst answering the main research questions.

Chapter 6: Summary. This chapter summarised the study, and it entails discussions, recommendations, limitations, and reflection of the study, as well as the conclusion. Thus,

this chapter highlighted the significance of the study and concludes with recommendations for further research.

1.11. SUMMARY

This chapter entailed the background of the study and the reason for conducting this research study. This chapter further highlighted the aims of the study which were to get a better understanding of how UKZN students (Howard college campus) perceive and experience online learning. furthermore, this chapter outlined the objectives of the study and the research questions that the researcher seeks to answer.

CHAPTER TWO

2.1. LITERATURE REVIEW

2.1.1. INTRODUCTION

Various researchers have explored the concept of online learning especially in the era of covid-19 global pandemic which has transformed and re-shaped the way higher education system convey teaching and learning globally. This chapter will, therefore, first look at the history of online learning and some types of online learning. For purposes of this study, this chapter will also delve into some online learning experiences experienced by students.

Covid-19 is a respiratory disease that was first reported in Wuhan, China in December 2019. The World Health Organisation (WHO) declared this outbreak as a global pandemic in March 2020. More than 245,972 additional cases had been reported as of March 20 and more than 160 nations were impacted (Worldmeter, 2020). Over 88,400 people have recovered from the illness, and 10,000 people have died as a result (World meter, 2020). Additionally, according to recent data, there are 9,590,890 confirmed patients in 216 different countries. According to WHO (2020) the most common symptom of this virus includes fever, respiratory problems, and cough. This virus spreads amongst people the same way ordinary flu spread, and it takes two to five days to show symptoms after being exposed to it, but it also takes up to fourteen days (WHO,2020).

The pandemic changed people lives as it dictated how they should live and interact with each other, as this meant that people should keep distance to avoid the transmission of the virus, According to WHO (2020) to avoid the transmission of the virus meant that people should work from home and students should learn from home. In addition to these changes people's access to social infrastructure such as malls was regulated. Furthermore, WHO (2020) asserts that to stop outbreaks, effective steps were implemented: Use face masks, practice good hand hygiene, and practice self-quarantine. Take personal, environmental, and community action actions. cancellation of major meetings, closure of schools and universities for social isolation, and participation in public events.

In most countries education programmes were disrupted and the South African government had to think of the ways to avoid further disruption of classes due to rules and regulation of covid-19 pandemic (DHET,2020), Additionally DHET (2020) argue that these restrictions

meant that higher education institutions should come up with ways that will restructure the way teaching and learning occurs taking into consideration the circumstances that students should be taught under. This necessitates a study of traditional classroom instruction before it can be put into practice. The scenarios used to teach must be able to reduce physical contact between students and lecturers or between students and other students. Online education is one alternate learning method that can be used in the Covid-19 emergency.

During the COVID-19 pandemic in 2020, the emergency lockdown imposed by most countries had a significant impact on everyone's work and social interactions. Traditional higher education institutions were also forced to switch from a predominantly face-to-face teaching mode to a completely online mode overnight. This necessitated a significant shift in core teaching and assessment practices. This disruption not only altered the higher education sector, but it also had a significant impact on student learning. There was an era of "emergency eLearning" because traditional modes of teaching and learning were no longer feasible. Online learning, according to Moore et al., (2011), is education that takes place over internet networks and has multiple types of learning interaction available.

Without the necessary pre-existing essential infrastructure or support services to deal with the altered teaching method, traditional universities found themselves in direct competition with distance education universities. However, Cranefield et al., (2021) argue that even before the pandemic of 2020, the proliferation of the Internet, the rate of digitalisation, and the rapid development of Information Communication Technologies (ICT) opened the door to a variety of educational delivery modes. Innovative educational technology tools gradually crept into education, and their use resulted in a pedagogical revolution. Moreover, Research studies (Van Lancker & Parolin; Beaunoyer et al., AL-Balas et al., (2020)) about the impact of COVID-19 on the online student learning experience were published soon after the emergency online remote learning was imposed in March 2020, and even as early as May 2020. A variety of viewpoints were considered in these studies: Student learning outcomes; student motivation and engagement; the importance of attitude; and learning platforms and challenges therefore the concept of online learning is not a new concept it has a history of its own.

2.1.2. Conceptualizing online learning

According to Mathivanan et al., (2021) with technology constantly advancing academics were compelled to change their teaching methodologies without having a clear roadmap that will attend to students' varied academic needs. Online learning has characteristics that range from face-to-face to e-learning. The best starting point for conceptualizing learning in the digital age is connectivism. Siemens and Downes (2022) define learning as the process of overcoming boundaries as the creation of links or linkages between human and non-human nodes through the usage of an interconnected network.

Connectivism learning heavily utilizes the Internet and other technological resources in order to build a beneficial network that will maximize learning. As a result, connection motivates academics at universities to consider how Internet access and other technological tools may be used for effective learning, enabling every student to get and communicate information despite whatever challenges (the digital divide) they may encounter (Bell, 2011; Mathivanan et al., 2022). In other words, access to the Internet and other technological tools must be made available so that students can communicate with one another and the lecturers, regardless of any obstacles they may encounter, for effective e-learning to take place even when they are at home.

Siemens (2019) emphasizes that in connectivism, students are seen as active participants who can nurture, maintain, and navigate network connections in order to acquire, share, and use information for learning rather than as a blank slate or passive recipients of knowledge. To achieve this, Siemens and Downes (2022) put forth eight guiding principles for connectivism learning, which are shown in Table 1 below. According to this study, these eight principles have now been conceptualized to create dichotomies between Face-to-face learning and e-learning. These concepts draw from basic learning frameworks (behaviourism, cognitivism, and constructivism) to combine both subject and social experiences for learning.

Table 1:Connectivism principles and conceptualised learning (Siemens and Downes, 2022).

| Connectivism principles | F2F learning | E-learning |
|--|---|---|
| 1. Learning and knowledge rest in the diversity of opinions. | Teacher-centred activities | Student-centred Activities |
| 2. Learning is a process of connecting specialised nodes or information sources | University | Home/residence |
| 3. Learning may reside in non-human appliances. | Traditional resources | Modern resources |
| 4. The capacity to know more is more critical than what is currently known. | Passive student | Active Student |
| 5. Nurturing and maintaining connections is needed to facilitate continual learning. | Institutionalised connections | Social connections |
| 6. The ability to see connections between fields, ideas, and concepts is a core skill. | Summative assessment | Formative assessment |
| 7. Currency (accurate, up-to-date knowledge) is the intent of all connectivism learning activities. | Formal content | Informal content |
| 8. Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. Although there is a right answer now, it may be wrong tomorrow because of alterations in the information climate affecting the decision. | <ul style="list-style-type: none"> • Professional rationale • Official time • Objectives | <ul style="list-style-type: none"> • Social rationale • Extra time • Learning outcomes |

With the rapid development and adoption of new technologies, learning has now been sought to be individually and socially constructed by students (learner-centred activities) in order to maintain a diversity of ideas. Traditionally, learning is thought to occur when the lecturer provides a positive reinforcement (teacher-centred activities) so that students can respond. This indicates that because digital learning aims to engage lecturers and students in a conversation for the social creation of knowledge, it is more participative and effective than traditional learning (Downes, 2010). Furthermore, Siemens and Downes (2022) concurs with Anderson (2016) that building and joining a community (node) of learners inside a network is learning.

This interconnection can also be made online, allowing students to access lessons while at home or in their residences rather than just within a location of learning. In other words, if there are compelling or forceful circumstances that prevent face-to-face learning, connectivism prioritizes e-learning as the first and best alternative for students to access learning. In addition, Siemens and Downes (2022) contend that while traditional resources like books, lectures, and chalkboards still serve as the foundation of education, students today must also have access to more contemporary tools like the Internet, computers, and mobile devices in order to connect with one another and share knowledge. In other words, contemporary materials encourage active student participation and increase their capacity to learn more; as a result, active students are better able to utilise the resources available to find out about current events from primary and secondary sources than passive students (Downes, 2010).

This implies that with connectivism learning, it is insufficient for a student to rely solely on the required readings, the taught material, consultation with one lecturer, and the students in a certain subject/module. Because learning is about more than just knowledge consumption, connectivism encourages students to enjoy exploring the world and connecting with others outside of the usual environment by using search engines, social media, and other tools (Anderson, 2016). The capacity to recognize connections between topic areas, ideas, and concepts will determine how pupils are evaluated (Siemens & Downes, 2022). In other words, since evaluation is done for learning purposes rather than grading, it must be entertaining for students (Black & William, 2009).

Students must be motivated by a professional and social reason when choosing what to learn and how to make sense of it because the information (objectives) given during the formal time in the lecture may vary over time based on new contributions in a subject (Downes, 2010). Therefore, extracurricular activities for the students should be incorporated within the lecture contact time in order to ensure that learning objectives are accomplished. Furthermore, the dichotomous nature of face-to-face learning and online learning is highlighted in a review of research by Damşa et al. (2015) on quality in Norwegian higher education.

In addition to identifying knowledge gaps in the literature, the study intends to identify important elements that enhance learning quality in higher education. It was discovered that communication, collaboration, supervision, and engagement are common to both platforms (Face-to-face learning and e-learning). However, e - learning offers many of these advantages over face-to-face instruction since it fosters a more intense environment for both synchronous and asynchronous teaching and learning. This shows that the usage of educational technology (videos, smart phones, learning management systems, and social media sites) is improving the quality of learning in the e-learning environment in comparison to the face-to-face learning environment. According to Damsa et al. (2015) e-learning promotes student-centeredness as opposed to teacher-centeredness in the teaching and learning of the subject matter.

2.1.3. HISTORY OF ONLINE LEARNING

Online learning is becoming a greatly used method of providing education at both undergraduate and postgraduate level. According to Harism (2000), the first entirely online learning was offered in 1981, however, online learning has a long history dating back to the nineteen centuries. Since then, universities all round the world have offered their courses online. With its advancement over the last ten years, the internet, and the world wide web (www) have drastically altered the practice of online learning. However, Wesley (2002) argue that the early forms of online learning consisted of existing training material that had been converted into an electronic medium with the introduction of the World Wide Web (www) in the 1990s, Web version 1.0 was introduced as a read-only medium through which information was transmitted and consumed, making people passive consumers of information. In the following decade, the world wide web version 1.0 was advanced, resulting in the emergence of the newer version of the world wide web version 2.0, which was introduced as a read and write medium. This resulted in the creation of a platform on which content could be created, shared, remixed, repurposed, and distributed (O'Reilly, 2006).

According to Graham (2005), the online learning revolution began when this medium introduced new geographically independent communication models such as email and web browsers that were efficient, simple to use, and economically viable for users to adopt. Sloman (2004) asserts that, suppliers of computer-based training were filled with optimism when they realized the implications of web-based delivery and elevated online learning to a

pedestal, promising that it would revolutionize education due to its flexibility, self-pacing capabilities, and significant cost savings compared to traditional instructor-led training courses (Wesley, 2002). However, as online learning evolved, certain issues arose, and critics emphasized the isolation of online learning and the importance of interaction in the context of teaching and learning (Wesley, 2002).

2.1.4. ONLINE LEARNING IN SOUTH AFRICA

In 1994 the South African government, saw online learning as a good approach that would uplift previously disadvantaged minority (blacks) by giving them access to information. Online learning provided the government an opportunity to address the injustices of the past experienced by people of colour when it comes to them accessing information. Online learning is also an educational practice that is required to successfully restructure the South African educational system to provide lifelong learning opportunities, as it seeks to reduce barriers to learning. According to the Department of Education's white paper on education (DOE,2006), education should be delivered in a flexible manner to allow as many people as possible to take advantage of learning opportunities throughout their lives. To do so, we must abandon the notion of education as something that takes place in a classroom setting where information is conveyed or shared by a lecturer. It necessitates the establishment of structures and conditions that allow students to learn when, what, and how they want. Importantly, it should not only be about accessibility, but also about providing quality learning with a reasonable chance of success. Since the year 2000, South Africans' interest in technology has grown, and more institutions are investing in information and technology infrastructure.

Using digital technology and several virtual learning platforms, the COVID-19 pandemic has refocused the world on an era of online learning. Despite this, many institutions have shifted from traditional to online teaching to avoid disrupting educational activities. As a result, the current situation has created new opportunities for digital learners while also imposing a few challenges for improvement in learning resources, learning designs, and faculty willingness to embrace technology enhanced learning. The demand for e-learning is increasing as students become more technologically advanced. When compared to traditional methods of learning, e-learning improves learning ability and self-regulating (Rehman & Fatima,2021). There are two types of e-learning: asynchronous and synchronous learning. Synchronous learning is the most used type of e-learning (Rehman & Fatima, 2021). The flipped classroom

(FCR), according to Rehman and Fatima (2021), is an active learning pedagogical approach that incorporates a combination of asynchronous and interactive synchronous learning tactics.

The introduction of FCR in various colleges and courses indicates the significance of this strategy as an appealing option to use in the future. FCR approach was created in response to the difficulty of digital education and to deploy a new method of online teaching during the pandemic. (Rehman & Fatima,2021).

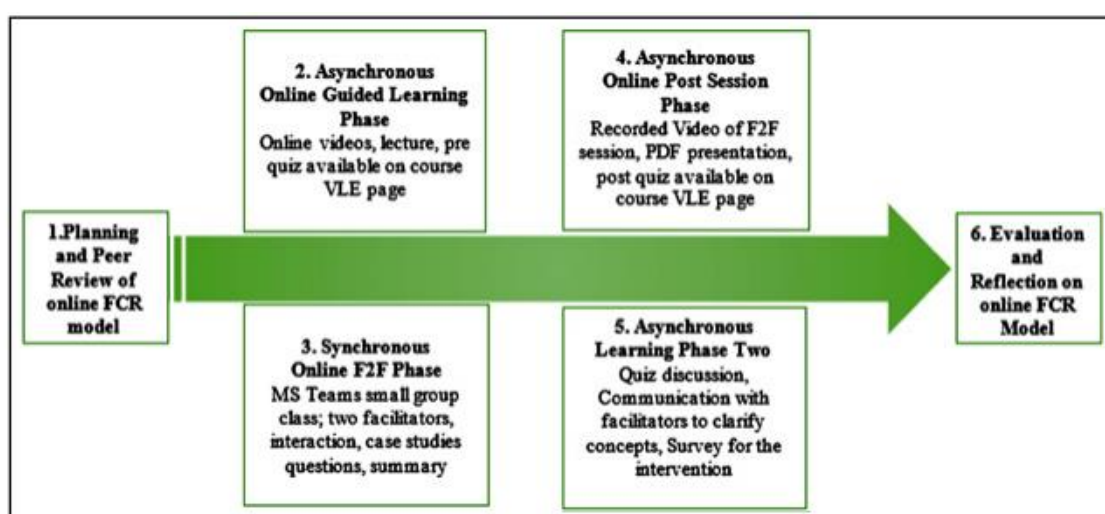


Figure 1:Explains the flow of events in the flipped classroom (Rehman & Fatima,2021).

2.2. CATEGORIES OF ONLINE LEARNING

2.2.1. ASYNCHRONOUS LEARNING

According to (Libasin et al., 2021), Asynchronous learning allows students to work at their own pace and at a time that is convenient for them. Examples of this type of online learning include e-mail and online conferencing. The most important aspect of this type of learning is that students are not required to be present at the same time or in the same location as other students who are learning and communicating with. However, it can happen that student are online at the same time by chance or if they planned to.

The most important feature of asynchronous online learning is that it is not time or space limited. Students from various time zones and continents can take the same classes. Students can explore and discuss the content in depth at any time, and they can also post their thoughts

or opinions about it for other students to comment on. Even those who are falling behind in the content will have access to all discussion posts, allowing them to benefit from the input of their student peers. According to (Libasin et al., 2021) asynchronous online learning is facilitated by media and discussion boards, and asynchronous online learning fosters work relationships between students and instructors, even if the participants are unable to connect to the internet at the same time as their peers. Asynchronous online learning allows students to access an online environment at any time and download documents or communicate with their instructor or peers.

2.2.2. SYNCHRONOUS ONLINE LEARNING

According to (Libasin et al., 2021), synchronous online learning entails interaction between students and a facilitator at a predetermined time., for an example when a lecturer conducts their zoom classes the students and the lecturer ought to be online on the zoon app while is scheduled by the lecturer. although the students and lecturers are in different places. The interaction is live and requires all participants to be available for the scheduled period when the classes are held. Synchronous online learning can take the form of texts, chats and/or video conferencing such as zoom (Hiltz & Goldman, 2005).

According to Hrastinski (2008), synchronous online learning is commonly used by the media in the form of video meetings and chats, and it has. Synchronous learning is perceived as more social by instructors and students, with students feeling more like active participants rather than passive participants. Synchronous learning also eliminates the frustration of having to ask and answer questions in real time. Takalani (2008) adds that in synchronous online learning, students and instructor(s) interact in real time via internet technologies. As a result, synchronous learning is a setting in which technologies are used to create a virtual learning space similar to that of a traditional classroom lecture. It follows, of course, that all participants have to be connected to the virtual learning space.

2.3. TYPES OF ONLINE LEARNING

2.3.1. FACILITATED ONLINE LEARNING

According to Broadbent (2002) Facilitated online learning is the most common type of online learning in academic settings. Facilitated online learning involves an interaction between the lecturer (often referred as facilitator) and students, however this interaction does not occur in real time they take form of virtual. Students communicate with each other, and their discussion is guided by the facilitator as the facilitator is the one who guides which topic the students must discuss, and this encourage peer interaction (Broadbent,2002). The lecturer brings value to the course by holding participants accountable for the various learning objectives. Through the interactive component of facilitated online learning, the lecture can judge whether the student is grasping the content. unlike the asynchronous nature of the discussions, this form of online learning still involves certain scheduling of meetings to review the module's lesson and close it off before moving to the next lesson.

2.3.2. SELF-PACED ONLINE LEARNING

There is no interaction between the lecturer and the student in self-paced learning. Web-based training courses are the most common type of self-paced online learning. Learning material is accessed and completed without the need for an instructor or student interaction. According to Broadbent (2002), self-paced learning is a process in which students can access computer-based, self-paced learning resources at their own pace. Modules are set up either online or through a software programme and the students interact with the material at their own pace to learn and acquire new skills.

2.3.3. BLENDED ONLINE LEARNING

There are several definitions of blended learning, according to Deng and Yuen (2009), there is no commonly accepted definition that has been developed. Blended learning, as defined by Garrison and Vaughan (2008), is a combination of face-to-face and online learning experiences that combines traditional physical classes with components of virtual education (Finn & Bucci, 2004) Blended learning, according to Choid and Groeneboer (2004), includes online learning, face-to-face learning, and self-paced interactions between facilitators and students. More than one teaching or learning approach is merged to

complement one other in blended learning, and students gain from receiving knowledge from both.

The essential premise is that face-to-face conversation and online written communication are combined to provide a unique learning experience that is coherent with the environment and desired educational objective (Garrison & Vaughan, 2008). More specifically, in a blended learning setting, the facilitator's and students' roles are reversed. This, on the other hand, promotes individual learning and initiation. While students in this type of learning are engaged and take initiative, they still rely on the facilitator to provide direction and generate conversation through questions. Blended learning allows the learning community formed in the classroom during face-to-face interactions to thrive outside of the typical classroom setting. Blended learning, according to Brown (2003), provides all of the advantages of online learning, such as cost savings, time efficiency, and student convenience. Furthermore, Aycock et al. (2002) discovered that blended learning promotes student interaction, student performance, and facilitator satisfaction with the course.

2.5. ADVANTAGES OF ONLINE LEARNING

According to Broadbent (2002) Students' perceptions of higher education have altered because of the rising use of online learning in higher education institution, but other advantages include flexibility, accessibility, active autonomous learning, responsibility, confidence building, and interactivity. Online learning allows students to learn at their own pace and is not restricted to a specific location or time. However, according to Katz and Oblinger (2000), the adoption of such technology has resulted in the removal of time and location constraints, with education available anytime the student desires. Furthermore, students can complete online courses while working in their own area, allowing them to contextualize their learning (Anderson & Elloumi, 2003). Additionally, according to Kruse (2006) one of most widely mentioned advantage of online learning is that it provides a comfortable learning environment, as students can study at home, are not constrained by their location, can study at any time, and are not constrained by time or space, all of which were grouped under the theme of a comfortable learning environment.

Churton (2008) argues that online learning provides for a more "student-centred" teaching method because learning occurs asynchronously, allowing students to avoid the constraints of traditional classroom practice, which requires everyone to learn the same topic at the same time. Concurrently, Kruse (2006) argue that one of the key advantages of online learning is active learning. Students are not passive consumers of knowledge, receiving it from academics who just pour it on them rather, students generate knowledge through experience and socialization (Kruse, 2006). Moreover, online learning according to Churton (2008), is a technology that encourages students to be more involved in their learning. Since students are responsible for their own learning, they must pay more attention to the material and acquire analytic abilities to determine whether the knowledge gained is beneficial or not.

Churton (2008) further argue that Online learning also promotes self-sufficiency. Thus, independent learners delve into the vast resources given in the digital environment. Additionally, Greener (2008) and Rodriguez, et al., (2008) argue that the independent aspect of online learning allows students to be self-paced while simultaneously developing critical thinking skills. Another advantage of online learning is that it encourages students to take charge of their education and develop self-awareness and confidence. However, Roberts and Dyer (2005), argue that online learning offers a variety of new techniques to promote learning and accessing materials at a convenient time while maintaining individual pace. Students can readily communicate with course information, instructors, and other students via forums, chats, or e-mail, and they can reflect on their messages before posting them. The essential power of online learning, Moreover, Bielawski and Metcalf (2003) argue that, is its ability to deliver the appropriate knowledge to the right individuals at the right time and in the right location.

2.6. THE CHALLENGES OF ONLINE LEARNING

The global education system faces significant challenges as a result of the ongoing COVID-19 pandemic. To provide students with ongoing education, traditional schools are being forced to transform into full-time virtual schools (Van Lancker & Parolin, 2020). As a result, students need from face-to-face learning to fully remote online learning, where synchronous video conferences, social media, and asynchronous discussion forums will serve as their primary venues for knowledge construction and peer communication. This abrupt transition is

difficult for students because they often have no prior experience with online learning. Maladaptation to online learning may expose inexperienced students to a variety of risks, including lowered academic performance (Molnar et al., 2019), feelings of isolation and a lack of learning motivation (Molnar et al., 2019).

2.6.1. Network and data cost issues

The limitations of online learning have been challenged. Bandwidth challenges, increased costs, greater workload, loss of human touch, and students having technical difficulties are all examples of these constraints. According to Namahn (2002), bandwidth constraints might cause slower performance of sound, video, and intensive graphics, resulting in extended wait times for learning material to be downloaded, which can hinder the learning process. In agreement to Namahn (2002), Lee (2020) further argue that students had to resort to climbing up trees and setting up camps on hilltops in order to get better connectivity to enable them to take their examinations. Moreover, Kruse (2006), argue that not everyone has access to high network bandwidth, it is not possible for online learning sites to use a large number of audio or video files. Concurrently Kruse (2006) further argue that due to network instability, there are frequently delays, the voices of the lecturers are not in sync with the course materials, and students are unable to participate in class when the wi-fi is down. There is no opportunity for interaction, and the teaching environment is subpar. Content is not accurately communicated, directly replied that it was challenging to pay attention in class for extended periods of time.

Cranefield et al., (2021) asserts that online learning has a variety of costs associated with it, including the initial cost, ongoing costs, and the cost of keeping the equipment up to date. Concurrently Carnevale (2006) argue that System development can take longer and cost more money than expected, and not all courses are delivered well by the computer hence online learning is more expensive than other methods. Therefore, Cranefield et al., (2021) argue that not everyone has access to technological equipment, even though prices are always falling. Cranefield et al., (2021) concur with Kruse (2004) when they argue that not everyone can afford to participate in online learning. Moreover, Cranefield et al., (2021) asserts that without the necessary training or support, academic staff are forced to changed and adapt their teaching materials to provide content that will be suitable for online delivery. In contrast to traditional examination halls with invigilators, even assessment strategies had to be modified for online implementation.

The changes brought on by the pandemic were difficult for academics, but Crane et al. (2021) contend that they were even more difficult for students, who had to deal with a number of different problems that hindered their studies at home and may have reflected their social situation. Additionally, some students found it difficult to acquire study materials because they needed a computer (rather than a smartphone) and Internet connectivity, which had a detrimental effect on their learning experience. Consequently, Greener (2008) argue that the huge workload is an issue connected with online learning. In addition to, technical difficulties, such as a lack of understanding of how technology is used or how it operates, or a lack of technology skills, can cause confusion and increase workload. However, Kruse (2004) further argue that students frequently suffer from technophobia, which is exacerbated by the lack of essential technologies. In agreement to this, Holley and Oliver (2010) argue that the technological demands of an online course might sometimes intimidate students, especially if they lack prior knowledge or expertise with online resources Prior to the start of a course. Therefore, academics must make sure that their students are familiar with how to use the technology required for the course.

2.6.2. Loss of human interaction

Computers cannot replace human interaction and relying on them too much reduces social activity (Khan et al., 2021). Moreover, Khan et al., (2021) concur with Otter et al., (2013) when they argue that online courses can lead to a sense of alienation between students and their lecturers as well as between them and their peers. As a result, motivation and engagement issues in class are frequently brought on by the sense of disconnection. Likewise, Otter et al. (2013) further agree that students in online classes feel more alienated from their lecturers and peers, had greater academic autonomy, and received less support from their Academics. Additionally, (Boardman et al.; Khan et al., 2021) concur that online courses are not always well-structured or run, leaving students feeling lonely or unsatisfied with their online learning experience. Hence, students and lecturers believe that online learning is impersonal and cold, and that the valuable component of direct discussion of class material between students and lecturers has been lost. Since the pandemic is accompanied by isolation measures that have led students and teachers to confine to their homes (WHO,2020). Therefore, it is stressful for teachers and students to learn and teach at isolated environment due to the pandemic. In online classes, students felt isolated because there are no group

projects, lack of communication and restriction in outdoor activities, which leads to social isolation.

Khan et al., (2021) further argue that Online education has transformed teachers' and student's relationships as teachers are not able to give extra attention and care to students who need more care and are suffering from physical exhaustion. The students also believed that online classes are not sufficient for them. However, Boardman et al., (2021) argue that when students feel that they cannot meet with the lecturers face-to-face or when it takes a long time for the student to receive a response from an academic, some students may believe that the Academics do not care about them or how well they perform in their classes.

In addition, Conole et al., (2008) argue that the majority of students believe that interpersonal interaction is crucial to creating a feeling of community. Thus, some students might do better in their classes as a result of this sense of togetherness because they do feel like they are a part of a community that is intended to be learning together. However, Boardman et al., (2021) argue that some students may also find it difficult to concentrate on their work or may believe that a course is less significant than others. Conole et al., (2008) still maintain that classes held in person foster a sense of connection between students and lecturers and it creates that social Connection amongst them, Conole et al., (2008) goes on to further say that connection is "feeling like you belong to a community and typically feel close to other individuals."

Furthermore, (Boardman et al., Khan et al., 2021) argue that the workload of teachers in online teaching has been increased due to needing to make videos, Power Point presentations and e-notes for students. Also, Covid-19 also restricted students to return to residences and they were forced to confine in their homes which decreased their interest and motivation to learn. Students can no longer interact with their peers and hold group discussion.

2.6.3. Home environment socio-economic status barrier

Due to the safety measures put in place by the WHO, this also forced students to study at home in addition to this Khan et al., (2021) argue that these safety measures came with lot of challenges for student's as they come from diverse backgrounds. Khan et al., (2021) further argue that female students are the ones who often get disrupted while taking their online classes, because they are expected to do house chores which can be strenuous and draining. In agreement to Khan et al., (2021), Boardman et al., (2021) contend that with the constant interruption, some female students miss their online classes because of the disruptions that comes with their home environment. therefore, it is important to take students background and home environments into consideration as this may lead to loss of motivation and decreased academic performance. Moreover, Khan et al., (2021) further argue that most of the student's family size has more than five members. Therefore, students are prone to have disruptions. Consequently, Khan et al., (2021) further argue that some of the students live in one roomed house and it is difficult for them to manage online classes due to a lot of difficulties as they have only one ICT device which is shared with their siblings at the same time leading to gender inequalities, as their parents prefer boys' education more instead of girls' education.

Beaunoyer et al. (2020) argue that students from wealthier backgrounds would naturally have better internet and computer gadgets, putting them in a better position to fully embrace the online learning experience. Nonetheless, Khan et al., (2021) argue that students who live in one room faced more distraction in online classes due to the unavailability of physical space and most of the students' parents are illiterate and cannot help in their children's education. In agreement to Khan et al., (2021), AL-Balas et al., (2020) argue that the lack of infrastructure that can provide equal access to learners has worsened students' negative perceptions of online learning platforms. AL-Balas et al., (2020) further goes on to say that students from low-income households will have difficulty gaining access to the internet and the basic devices necessary to participate successfully in online learning.

The sudden launch of online education may escalate the already prevailing socio-economic disparities in education. Additionally, Barrot (2021) argue that Some students' financial difficulties were made worse by COVID19, which had an impact on how well they learned online. According to Halupa (2016), the presence of a wide range of distractions makes it highly likely that students will be distracted when utilizing the internet as a learning tool.

Furthermore, Halupa (2016) further argues that due to the elevated levels of addiction, the existence of social media platforms has proven to be a serious concern for students. As a result of this condition, students are unable to concentrate on the content delivered by the instructors through the internet. Students' inability to focus on the information presented through the platform would cause them to become more stressed because they would not have understood the lecture's topic and could not complete their assignments in line with the lecturer's requirements. This syndrome appears to be the cause of the elevated levels of stress and anxiety seen among online tertiary students,

2.6.4. Increased levels of anxiety

The learning styles of tertiary students have been influenced by Covid-19. Online learning, according to Chandra (2020), has caused significant disruption among parents and students. Although there is evidence that online learning improves students' ability to comprehend and retain material at a faster pace, more research is needed. In addition, Grubic et al. (2020) suggest that the constrictive learning conditions connected with online learning will inevitably lead to greater stress and unfavourable academic results. This argument is supported by public health research that show a rise in psychological disorders during the pandemic. According to Wang et al (2020), self-reported moderate to severe depression predominates, Furthermore Barrot (2021) asserts that students had difficulty completing their assignments and activities, and their motivation to keep learning had been negatively influenced by the anxiety, boredom, unhappiness, and loneliness they felt. In addition, Duraku & Hoxha (2020) argue that difficulties with online learning, a lack of desire and concentration, and changes in student life have all had an impact and have caused both anxiety symptoms and perceived mental stress.

This pattern has been attributed to the pervasive impacts of ambiguity, as well as anxieties about the pandemic's health ramifications (Brooks et al., 2020). The main source of concern was the pandemic's influence on students' studies and future prospects. According to Hasan and Bao (2020), inadequacy of the learning strategy is another significant factor contributing to higher stress levels among university students. The adoption of the online learning technique, in particular, has exposed learners to a wide range of challenges, owing to a lack of familiarity with its implementation (Rasiah et al., 2020).

The efficiency of online learning is primarily determined by the methods used by students and instructors to conduct the learning process (Adnan & Anwar, 2020) Despite being the

most promising alternative to traditional learning methods, students have had a negative attitude toward online learning. In this instance, unfavourable attitudes may be to blame for the psychological suffering that has been reported in recent years as a result of the broad adoption of online learning.

2.6.5. Lowered self-motivation and Impacts on academic performance

According to Boardman et al. (2021), online courses primarily rely on student motivation, and even when students are left alone, they must be able to do their projects on time. To complete online assignments, students must find the motivation to do so. As a result, some students could struggle to stay motivated or perhaps procrastinate more frequently. In agreement to this, Upton (2006) contends that since the lecturer plays the function of the motivator in face-to-face lectures, a student's lack of desire may prevent them from learning the subject, either completely or at all. In particular, it is accurate to say that students' desire for less exciting or foundational courses may have a negative impact on their learning. However, Hermanto and Srimulyani (2021) further argue that online learning results on the lack of student discipline, lack of motivation, lack of student discipline, fatigue, and boredom because most were only in the form of online assignments, constraints on the internet, and technological devices.

Boardman et.al, (2021) argue that being sociable and learning in an academic atmosphere require a great deal of feeling connected to other people. Likewise, Diep et al., (2019) argue that student performance and motivation both in and outside of the classroom will be influenced by feeling connected to other students and to one's teachers. Therefore, it is crucial that this sense of community endures even when classes are not held face-to-face. However, Conole et al., (2008) argue that the majority of students believe that in order to foster a sense of community, face-to-face interaction is crucial. However, it is also not disputable that Some students may do well in their classes because of this feeling of belonging but due to their lack of confidence, some students may find it difficult to concentrate on their work or believe that a course is less significant than others.

In addition, Otter et al., (2013) argue that online classrooms can create a sense of separation between students and their peers as well as between students and their teachers. Moreover, disconnection can also lead to issues with motivation and participation in class. Furthermore, Otter et al., (2013) argue that students who are less dependent on their academics feel more

alienated from their lecturers and classmates. They also shown greater independence in their academic pursuits. However, Boardman et al. (2021) argue that when students cannot meet with their Academics face-to-face or when it takes the lecturer a long time to respond, some students may believe that the academics do not care about them or how well they perform in their classes. Moreover, throughout one 's life, people look for interactions with one another. People desire for a sense of belonging among one another. In agreement, Adams et al., (2017) argue that the desire to build secure and fulfilling relationships with others and engage in meaningful interactions with them is connectedness. A student's motivation and performance in the classroom may be impacted by this sense of belonging. For a person to feel self-determination, one element that is required is the sense of connectedness.

However, Siti et al., (2020) argue that everyone should be able to exercise self-determination since it supports good health, and it is necessary for societal advancement and wellbeing Self-determination. Moreover, Siti et al., (2020) further goes on to say that self-determination also affects motivation since it makes people feel more driven to act when they believe their choices will have a bearing on the outcome. Thus, it's critical that students experience self-determination if they are to be intrinsically motivated in their lessons. Without them feeling linked to their peers and teachers, this would not be feasible.

According to research by Evans et al. (2004), he discovered that students perform better when their online course content is available in an interactive, navigable format rather than as a compilation of scrollable web pages. This could also promote a sense of connection or belonging with a lecturer. In contrast to this, Magalhes et al., (2020) argue that there is no assurance that can be given that students will perform better in an online or face-to-face course. Thus, there is no guarantee that either in-person or online classes will help or impede a student's ability to learn. In contrast, Carini et al., (2006) asserts that although the degree of these impacts may be little, traditionally taught courses are often connected with student involvement and academic performance. Additionally, Davies and Graff's (2005) contends that students perform better academically than those who participated less in online courses. In contrast to this, Phillips (2015) argue that the majority of students prefer online education but believed that part-time courses would be a better fit. However, in contrast, Nenagh and Rachel (2014) argue that students strongly prefer face-to-face discussions because they are more involved and appreciated the prompt feedback. However, these same students also preferred online tasks, especially written projects, because it gave them the freedom to finish their work when it was convenient for them (Nenagh & Rachel, 2014).

2.7. THEORETICAL FRAMEWORK

Various learning theories have been discussed within the field of learning which include the constructivism learning theory and this theory was discussed within the context of the online learning. Prior studies have linked constructivism to the origins of internet communities. Johnson (2001) argue that constructivism put the individual at the centre of model. Additionally, according to constructivism, a learner's interactions and experiences are what lead to new knowledge. Wertsch and Hagstrom (2004) they suggest that a user's interaction with OSN technology can have a direct impact on these interactions and experiences. OSN technology can be set up to accommodate a wide variety of participants. largely related to Piaget's work, who was the first to postulate that a learner's interactions and experiences within a particular context might serve as the basis for learning.

Constructivism offers a comprehensive perspective on individual learning and how people interact in bigger groups. According to Hagstrom and Wertsch (2004), constructivism promotes, makes use of, and celebrates each student's distinctive and multifaceted traits throughout the educational process. Furthermore, constructivism, according to Squires (1999), emphasizes human control, with people choosing choices based on their own wants. Although constructivism was initially utilized as a theory of learning, it has since been applied to education, the origins of ideas, and both scientific and personal knowledge (Matthews, 2002). In the context of this study, our OLC (Online learning centre) is made up of people who share a space and are therefore strongly influenced by their interactions with technology and other people. As a result, it is possible that various people may view the community in diverse ways.

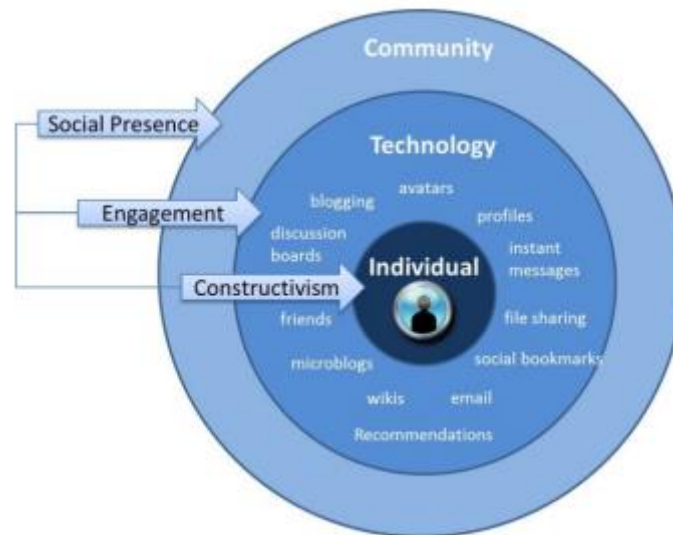


Figure 2: Illustrates constructivism theory in online learning (Matthews, 2002).

2.7.1. CONSTRUCTIVISM LEARNING THEORY

Constructivism, according to Chieu (2007), is a learning philosophy that emphasizes people actively learning by developing their own knowledge based on existing knowledge. Chieu (2007) asserts that constructivism is a learning process that entails active knowledge construction and transformation. Vygotsky (1978), Piaget (1972), and Bruner (1996) stated that students learn actively and construct new knowledge based on earlier learning which helped to shape the constructivist theory. Most learning theories, according to Knowles and Kerkman (2007), are founded on the constructivist approach of learning, which asserts that the learner constructs meaning and knowledge through a process of linking new information to existing knowledge and experience. Driscoll (2004) recognizes the following five major aspects of constructivism learning theory:

- Retention, understanding, and application
- Reasoning, critical thinking, and problem solving
- Ability to think
- Self-control and thoughtful reflection
- Flexibility in epistemology

Given the advantages of online teaching and learning, educators act as facilitators and students take ownership of their own learning. In that way students define the learning agenda; therefore, teachers must offer relevant interactive online lessons to encourage the development of knowledge (Murpy & Cifuentes, 2001). Students control the learning agenda in online learning in a sense that the academic only directs and provide the learning material to student. Therefore, the whole responsibility of learning and creating new knowledge is upon the student. Since they are the ones who dictate how they learn and what to study at what time. Hence, the facilitator provides students with learning materials through learning sites such as (i.e., Moodle), and it is the duty of the students to engage with the learning material at their own time and pace.

Within a constructivist framework, online learning aims to attain specified learning outcomes. As a result, learning is a process of engaging in problem-solving tasks that are linked with learning objectives, with assessment serving as a clear indicator of whether the learning objectives have been reached. This alignment between learning tasks, objectives and assessment serves not only as an evidence that the student has achieved the learning objectives, but also an illustration of the quality of learning received (Fallows & Bhanot, 2005). Furthermore, according to Rohleder et al. (2007), the use of ICT in education promotes and enhances active student engagement with content, educators, and each other; it also improves problem-based learning, improves information gathering skills, improves communication between educators and students, ensures accessibility of learning content, and improves administrative tasks. Boulos et al. (2006) further says that the use of ICT in education is beneficial since it has been found to expand communication channels, facilitate collaborative learning, and provide a framework for social knowledge building.

These features of ICT in education allow students to take charge of their own learning and educators to serve as facilitators rather than lecturers. Furthermore Chaung (2021) asserts that the objective of learning, according to constructivist learning theory, is to construct and acquire knowledge from one's experiences. Individuals' internal creation and accumulation of reality is not only an active process of constructing new ideas or meanings from current and previous experiences, but also an active process of constructing new ideas or meanings from current and prior experiences. As a result, learning is all about interpreting Performance Improvement through various structures. Therefore, teaching and learning in this view, is about assisting students in developing more integrated cognitive systems.

According to Hiemstra (2007) the constructivist approach emphasizes the importance of an academic in fostering learning, while the students' duty is to construct their reality through interactions with the environment. Constructivism is based on the idea that students should enjoy learning, develop social and people skills, comprehend the material being taught, and learn to think efficiently (Kelsey, 2007). Constructivism promotes teamwork and cooperation in the classroom (Palloff & Pratt, 1999). Students gain real-world experience by collaborating with other students.

Finally, constructivism learning theory has proven to be a good fit for this study since it places an emphasis on knowledge production based on the students' prior learning. Because online learning is a student-centred approach to learning, this idea not only encourages knowledge production but also promotes learning among students. As a result, constructivism learning theory, according to Swan (2005), considers learning as an active process that takes place within an individual's cognitive function. Swan (2005) goes on to say that constructivism learning theory explores the effects of online learning environments on external representations, individual conceptualizations, and social uses of knowledge on thinking and learning. As a result, this model can be used to guide practices and develop online education, as this study also aims to explore how students experience online learning and where do facilitators/lectures need to alter when conducting teaching to enhance active learning. Additionally, Constructivist learning theory, according to Chaung (2021), can be used to better comprehend experimental learning, self-directed learning, informal learning (e.g., online learning and mentorship) and accidental learning (e.g., task accomplishment, interpersonal interaction). Therefore, Constructivism learning theory will be used in this study as a guiding theory that will help the researcher to better understand how online learning works from a student's perspective and to establish whether during online learning are learning objectives and needs of the students met and whether active learning process is occurring.

2.8. conclusion

This chapter discussed how various literature about online learning. Additionally, the chapter also discussed the challenges and benefits of online learning. The literature review demonstrated the impact of covid-19 in the way students experience online learning. Not only did the corona virus outbreak impacted the higher education system but it affected the world globally as it came with drastic changes that needed to be enforced as the new way of living. Furthermore, this chapter discussed how the guiding framework is suitable for understanding varied students experiences and perceptions of online learning and how it can be used by academics and institutions to restructure their teaching approaches meeting the varied needs of students.

CHAPTER THREE

3.1. RESEARCH METHODOLOGY

3.1.1. Introduction

This chapter includes the techniques and procedures utilized during the data collection and analysis phases of the research. Research is a systematic attempt to discover different knowledge, as defined by (Pandey & Pandey, 2021). In other words, research is a method for learning more about a specific subject of interest. According to John Best (1998), research entails defining and redefining problems, formulating hypotheses or suggested solutions, collecting, organizing, and evaluating data, deducing, and arriving at conclusions, and finally evaluating the conclusions to see if they fit the formulated hypothesis. Through the application of scientific methods and procedures, research is utilized to get the necessary knowledge and answers to the study issue of interest.

The main aim of the current research study was to gain a comprehensive understanding of UKZN students' perceptions and experiences of online learning. This chapter, therefore, explores the research technique employed, research instrumentation, sample, research environment, data collection, and data analysis, as well as the many research data gathering methods that were used during the study.

3.1.2. Research Methodology

This study made use of a qualitative study design and it is positioned in the interpretive paradigm which assumes that the social reality and human experiences are embedded within a specific context. The researcher did not make use of quantitative research because it seeks regularities in human lives by separating the social world into empirical components called variables which can be represented numerically as frequencies or rates and whose associations with each other can be explored by statistical techniques (Rahman, 2017). Therefore, qualitative research design is chosen because it is in-depth and it provides an accurate and detailed picture which aims to explain and understand the subjective experiences (Ulin et al., 2002). In adopting this research design the researcher will be able to elicit broader understanding of the participants' experiences and will be able to formulate interpretations

that are corresponding to the research topic. However, Neuman (2013) argues that the purpose of qualitative research is to understand how meanings are constructed in their context and discover how people make sense of the world. Moreover, Neuman (2013) asserts that how one understands their reality is vital in qualitative research as these contain the meaning that individuals use when they interact with others. Therefore, the study made use of qualitative methods because the researcher aims to explore the personal in-depth meanings and understandings of how students at the university of KwaZulu-Natal perceive and experience online learning ever since it was introduced to them in 2020. Using a qualitative research approach will allow the researcher an in-depth exploration of this phenomenon by examining how these individuals personally describe and articulate how they perceive and experience online learning since individuals experiences and perceptions they vary from each other, no same people will experience and perceive the same. Hence, experiences and perceptions are a subjective phenomenon and that is why qualitative research was employed in this in order to gain an in-depth understanding and explanations of these subjective experiences and perceptions of online learning.

3.1.3. Research setting

Mouton (2001) state that a researcher should aim at describing and understanding all the events that are relevant to a study in the concrete and natural context in which they occur. This study was conducted in a natural setting which was convenient and comfortable for the participants. The selection of the setting was determined by the availability of the participants who are exposed to online learning as they were able to provide relevant data pertaining to the study. Additionally, this study was conducted at Howard college campus one of the five campuses found at the university of KwaZulu-Natal, this campus is situated in Durban, Glenwood. The university of KwaZulu-Natal was formed following a merger between university of Natal and Durban Westville university in January 2004, however, Howard college campus was formed following a donation from Mr T.B Davis in 1931. This campus offers a wide range of courses from four different colleges: college of agriculture, engineering and science, college of health sciences, college of humanities, college of law and management studies.

3.1.4. Sampling strategy

The study made use of purposive sampling methods. According to Neuman (2014, p. 273), purposive sampling refers to “A non-random sample in which the researcher uses a wide range of methods to locate all potential causes of a highly specific and difficult-to-reach population”. Furthermore, purposive sampling is a form of non-probability sampling that uses the judgement of the researcher in selecting participants with a specific purpose in mind (Neuman, 2013). The researcher used purposive sampling because they were specific on their sample being undergraduate students at the university of KwaZulu-Natal (Howard college campus). The sample relevant to the study consisted of (n=8) eight UKZN undergraduate registered students, out of eight participants three were from college of humanities, two from college of law and management studies and the remaining three were from college of agriculture engineering and science.

To avoid interfering with Covid-19 rules and regulations, the researcher recruited eight undergraduates' students online through the university emails (the researcher requested the administrators from various faculties to contact undergraduate students on her behalf. The email specified that out of the eight participants two of the sample must be from college of law and management studies, another three must be from college of agriculture engineering and science, then rest of the sample must be from college of humanities.

It was not certain that the specified sample will be willing to participate, Therefore the researcher planned and scheduled the interview times and days based on the possible participants' availability. Eight people were interviewed which included first, second, third, and fourth-year students from several colleges on the Howard College campus. The rationale for this was the belief that they would have more information because they had prior online learning experience at UKZN.

3.1.6. Data collection

One on one semi-structured interviews were used as a form of data collection method in this study. According to Kriel (2003) the purpose of conducting one on one interviews is creating an atmosphere that is comfortable to the research participant. The use one on one semi-structured interviews were effective in this study, as the participants were able to give an in-depth and thorough narrative of how they perceive and experience online learning. Interviews were conducted in English, unless the participant stated otherwise. As Longhurst (2003) argue that expressing oneself through language they understand and comfortable with allows

them to provide genuine meanings that they attach to their social realities. The duration of each interview was 30-45 minutes, and they were guided by interview schedule.

Due to the restrictions and regulations of covid-19, interviews were conducted through online measures such as zoom, and the researcher interviewed eight participants. Janghorban, et al., (2014) asserts that with technology advancement the experience of online interviewing in qualitative research have also been developed thus reducing problems associated with face-to-face interviewing. All interview sessions were recorded by a researcher on Zoom cloud recording from a laptop with the zoom app. The data recorded was transcribed later. The electronic data obtained was stored and kept safe by being stored on google cloud storage and the data was encrypted with password that only the researcher knew. For backup purposes the data was also stored on the encrypted USB that the researcher kept safe.

3.2. Method of Data Analysis

Data analysis is the methodical search for meaning, it is the process that involves making sense of data (Merriam, 2002). Data analysis involves the process of immersing on the available data with the purpose to answer the initial research question (Blanche et al., 2006). Within a qualitative framework, data analysis begins by bringing together and organising all the information about the case at hand, for example the interview transcripts (Patton, 2002). The qualitative researcher's focus thereafter will be on interpreting and understanding the social world of the participants. Furthermore, the aim of analysis is to understand the various elements of the data and to identify patterns or themes (Mouton, 2001). The method of data analysis that was chosen for the present research study was thematic analysis.

3.2.1. Thematic Analysis

This study used thematic analysis to analyse data collected. According to Braun and Clarke (2012) thematic analysis is a process of analysing data through encoding qualitative information. The interview data that was collected was recorded and was transcribed through verbatims and codes. This data was grouped into sub-themes and themes after transcription. Thematic analysis is a qualitative method for analysing, identifying, and reporting themes or patterns in data and it describes and organizes qualitative data in a rich and in- depth manner (Braun & Clarke, 2012). The researcher used an inductive approach to thematic analysis. An

inductive or 'bottom up' approach to thematic analysis involves the process of coding data that is collected in a manner where the researcher does not attempt to fit the data into a pre-existing coding framework or the researcher's preconceptions around analysis (Braun & Clarke, 2006). There are six phases as outlined by Braun and Clark (2006) in conducting thematic analysis that the researcher followed in the analysis of the data for the study.

Step 1: familiarising oneself with the data

According to Braun and Clarke (2006) this first step involved familiarizing oneself with the data, then after collecting the data, the researcher familiarized themselves with all the data collected. This process involved immersing oneself in the data through active re-reading and being aware of themes or patterns in the data (Braun & Clarke, 2006). This phase also involved the transcription of verbal data (for example, the transcription of interviews in the study) which is also a way of familiarizing oneself with the data. Before beginning data analysis, the researcher must have some prior understanding of the data (Braun & Clarke, 2006) Therefore, the researcher engaged herself in the data gathered, reading, and rereading the research findings while jotting down any initial thoughts she had. Furthermore, before coding and constructing themes, the researcher needed to look through the entire data set, as this made it easier for the researcher to spot possible trends. Furthermore, Braun and Clarke (2006) claim that this is a good technique to get the researcher acquainted with the data.

Step 2: generating initial codes

This stage occurred once the researcher as has read and re-read the data collected with the purpose of familiarising herself with it. According to Braun & Clarke (2006) this stage involves the researcher generating initial codes from the data (Braun & Clarke, 2006). Codes are segments of the data that appear interesting to the researcher, the researcher coded as many themes or patterns within the data as possible (Braun & Clarke, 2012) furthermore Braun and Clarke (2012) argue that Codes specify and give a name to a data aspect that may be pertinent to the research issue. Latent or semantic levels of meaning can both be coded. Codes can summarize some data or describe its substance. Descriptive or semantic codes usually stick closely to the meanings of the participants and the data's content (Braun & Clatke,2012). Codes can also provide an interpretation of the data's substance that goes beyond the meanings of the participants. These interpretive or latent codes reveal meanings that are hidden under the data's semantic surface.

Step 3: searching for themes

Braun and Clarke (2012) argue that as you change from codes to themes, analysis then begins to take shape. The definition of a theme is that it "captures an essential aspect of the data in relation to the research question and represents some level of patterned response or meaning within the data set." Braun and Clarke (2012) further contend that this phase entails analysing the coded data to find areas of overlap and similarity between codes. By compressing or grouping codes that appear to share a common trait, themes, and subthemes, which are the subcomponents of a theme, can be generated. These themes and subthemes can then be used to explain a cogent pattern in the data Within our data,

Therefore, the researcher proceeded to the third stage once all the data collected had been coded and this stage involves the process of sorting all the coded data into themes, sub themes and the relationships amongst them, so that. Braun and Clarke (2012) further outline that the researcher needs to refine themes and the refinement of themes occur in the fourth phase of

Step 4: Reviewing themes

The refinement of themes occurs on two levels, first is the reviewing and refinement of each coded theme and then reviewing the entire data set and looking at the relationships amongst the two to create a thematic map of the data (Braun & Clarke, 2006). The topics are reviewed and refined on two levels at this phase. The first step entails examining the data extracted at the coded level (Braun & Clarke, 2006). This required the researcher to study all the data extracts for each theme and determine whether they formed a clear pattern. The researcher moved on to the second level of the phase once he or she realized that the topics formed a logical pattern. A similar method is used at the phase's second level, except this time it is applied to the entire data set.

The validity of specific themes in connection to the data set must be considered by the researcher. In this phase, the researcher goes over the full data set again to see if the themes are still valid and to code any new themes (Braun & Clarke, 2012). The researcher had a decent concept of the numerous topics and how they fit together by the end of the phase.

Step 5: defining and naming themes

This step involved refining and naming themes. This is a process whereby the researcher identifies what each theme is about (Braun & Clarke, 2012). During this step, the researcher conducted continuing analysis to fine-tune the specifics of each topic as well as the overall

picture told by the analysis. Define and refine, according to Braun and Clarke (2012), implies recognizing the core of each topic and identifying what component of the data each theme captures or addresses. As a result, it is critical that the researcher considers how each theme may be integrated into the research data while avoiding overlapping themes at this stage.

The researcher focused her themes on the research questions to be true to the study's purpose. The researcher also made sure that the themes were connected to the research questions and the study's main objective. Each theme was named and captured by the researcher, who created clear definition (Braun & Clarke, 2012).

Step 6: report writing

Finally, once the researcher had organised the themes completely, the researcher then did a final analysis in preparation to write a thematic content analysis report, and this was the last phase in phases outlined by Braun and Clarke (2012) for thematic analysis. At this phase, the researcher had chosen the themes that were most relevant to the research study and had begun the analysis and writing of the report. The article included topics drawn from the research findings.

3.2.2. Critical reflexivity

Coburn and Gormally (2017) argues that critical reflexivity entails a thorough examination of the phenomenon under investigation, as well as the impact of the researcher's own assumptions and behaviour on the inquiry. Because the researcher was also a UKZN student who was impacted by online learning, he or she had to reflect on his or her own biases and prejudices. Critical reflexive practice, as defined by Coburn and Gormally (2017), is adopting one's subjective knowledge of reality as a foundation for thinking more critically about the impact of one's assumptions, values, and actions on others. Given the topic matter, it was vital that the researcher closely consider his or her personal bias, which could have an impact on the research findings.

3.2.2.1. Trustworthiness

According to Coburn and Gormally (2017) the trustworthiness of the research is determined by the dependability of the research that is used to determine validity and rigor. Additionally, Coburn and Gormally (2017) argue that there are four factors to consider when determining

how trustworthy the research is and these factors include credibility, transferability, reliability, and confirmability.

3.2.2.2. Credibility

According to Coburn and Gormally (2017) when a qualitative research study gives an accurate interpretation of human experience that can be recognized by others who have had similar experiences, it is considered dependable. For example, one student's experiences and views may be similar or familiar to another. To verify the research study's credibility, the researcher returned to the participants with the data collected to check that the data was appropriately interpreted and represented the participants' perceptions.

3.2.2.3. Transferability

Coburn and Gormally (2017) argue that the process of transferring research findings or methodologies from one group to another is referred to as transferability. The geographical area of the research study was described in detail, as was the in-depth description of the participants, which helped to achieve transferability. Furthermore, the researcher used research technique to go over the specific methodologies of the research study process.

3.2.2.4. Dependability

The study's dependability was established by describing the data collection techniques, the time range, and the analysis of the collected research data. Furthermore, dependability was established by describing the study's goal, as well as how and why specific participants were selected.

3.2.2.5. Confirmability

According to Coburn and Gormally (2017) once credibility, transferability, and reliability have been established, confirmability may occur. The researcher achieved confirmability through a reflexive procedure in which the research examines its own assumptions. The researcher's beliefs were invalidated by in-depth open-ended interviews.

3.3. Ethical considerations

Artal and Rubenfield (2017) contend that the fact that people are the focus of social science research creates particular ethical issues. Therefore, it was crucial that the researcher pay attention to all ethical issues that can come up when conducting a research project. Doing no harm, obtaining informed consent, reporting anonymously, gatekeeper consent, maintaining confidentiality, and participant consent are among them.

Before the commencement of the study the informed consent letter was obtained from the registrar who acts as a gatekeeper for UKZN students (Appendix C). Ethical clearance to conduct this research study was obtained from the University of KwaZulu-Natal ethics committee (Appendix D). Informed consent was gained from each participant upon them agreeing to take part in study (Appendix A). Before the data collection process, the aim of the study was clearly explained to the participants, and they were given an opportunity to ask questions for clarity. Prior interview session the consent for recording the interview sessions was gained and the participants were informed of their voluntary participation and that they can withdraw from the study if they felt uncomfortable. Confidentiality was ensured by using pseudonyms in the tape and the tapes were stored in a secure place. Lastly participants were informed that their participation was anonymous. The data collected was to be stored in the safe place for not more than five years then it will be destroyed if the researcher decides to publish the anonymity of every participant will be maintained and no identifying information will used.

The research study should not do any harm to the participants, which is a component of an ethical concern that needs to be considered. Artal and Rubenfield (2017) claim that participants may suffer bodily or mental injury. Therefore, it was the ethical responsibility of the researcher to safeguard the participants against injury before the research project even got underway. According to Artal and Rubenfield (2017) it is the responsibility of the researcher to shield participants from any discomfort throughout the research project. Thus, it was crucial for the researcher to explain to the participants the purpose and details of the study so that they could decide whether or not to participate. During the research study, the volunteer suffered no damage, and no risky experiments were conducted. The researcher also let the participants know that the required arrangements and support would be made if they felt uncomfortable throughout the interview procedure.

3.4. Conclusion

This chapter detailed the techniques and methods used by the researcher to collect and analyse the required data. This chapter described the measures taken by the researcher to gather the data, the instruments utilized, the study's environment, and the students' participation. The chapter also described the approach and the procedures that the researcher took to analyse the data gathered from the participants. The ethical issues that were used in the beginning of the study were discussed in this study.

CHAPTER 4

4. RESEARCH FINDINGS

4.1.1. INTRODUCTION

The previous chapter outlined the research methodology of this study. This chapter presents the qualitative results of the semi-structured interviews through thematic analysis. The goal of this research study is to address the key research questions that informed the study's focus areas as outlined in chapter one as follows:

- What are the experiences of university students of online learning?
- How is the experience of the transition from traditional method of teaching and learning to online learning?
- What are the challenges and benefits of online learning?

The findings of this research resulted in the emergence of important themes, which will be examined in greater detail in this chapter. The themes that emerged are as follows: Transition to the university environment, Experience of online learning, Challenges of online learning, Benefits of online learning and Forms of support offered and the coping strategies that the students use to cope with online learning.

4.1.2. DEMOGRAPHIC REPRESENTATION OF PARTICIPANTS

It is crucial to disseminate the socio-demographic representations of the research participants (see Table 4.1 below) before discussing the research findings. The demographic data exhibits that there was an unfair distribution with regards to race, with Black people being more than the other races (such as Indians). The reason for this was because the researcher had difficulties in recruiting other races as they were unavailable or not easily accessible to the researcher. The participants ranged from the ages eighteen to twenty-five, with Black people being more interested to participate.

Table 2:SOCIO-DEMOGRAPHIC DATA

| | | NUMBER OF PARTICIPANTS |
|---------------|-----------|------------------------|
| GENDER | MALE | 4 |
| | FEMALE | 4 |
| TOTAL | | 8 |
| YEAR OF STUDY | 1ST YEAR | 1 |
| | 2ND YEAR | 3 |
| | 3RD YEAR | 1 |
| | 4TH YEAR | 3 |
| TOTAL | | 8 |
| RACE | BLACK | 7 |
| | INDIAN | 1 |
| | WHITES | 0 |
| | COLOUREDS | 0 |
| TOTAL | | 8 |

4.2. Thematic results

The researcher analysed the data by carefully perusing the transcripts obtained from the interviews. Themes and subthemes emerged to support the study aim and objectives. The themes and subthemes that emerged are shown in Table 3 below.

Table 3: Themes and sub-themes emerged in this study

| Themes | Sub-themes |
|--|---|
| 1. Transition to the university environment | |
| 2. students Online learning experience | |
| 3. Challenges of online learning experienced by students | <ul style="list-style-type: none"> -Network issues and technical issues - Lack of learning devices -Lack of understanding of how online learning works - Increased workload - Loss of Human interaction - Lack of motivation and time constraints |
| 4. Benefits of online learning | <ul style="list-style-type: none"> - Flexibility |
| 5. Impact on academic performance | |
| 6. Coping strategies used by students to cope with online learning | <ul style="list-style-type: none"> - Extra study hours - study groups |

4.2. Transition to the university Environment

Transition to the university environment can be explored as a journey one embarks on from being a high student to being university student. The research findings portrayed that students found that their transition to university environment challenging and difficult. However, as soon as they adapted and adjusted to the university environment their transition became manageable. Transition to the university environment differs from student to student, no experience or journey is the same. Some participants found their transition difficult and challenging for them.

Participant 5 pointed out that:

“To be honest my transition was difficult at high school everything was there, my family and my friends, everything started being difficult when I received an acceptance offer, moving from home to an unfamiliar place with no friends, family, I was all alone[paused]. I remember my first day at Howard college campus I came late when the university was about to close for business day, the reason for that is because my home is far away from Durban as I am from Mpumalanga province. I tried to get help and by that time I did not know whether my NSFAS was approved or not. I tried to register but they told me my NSFAS has not yet approved and I should come back tomorrow, and in few minutes, they close[paused]. I had no place to sleep luckily there was a friend from back home who was also studying at UKZN Howard college campus and that is when I felt relieved because at that moment, I needed someone to be around with. Then I tried to get into contact with her. The following morning, I went back to fees, and they assisted me, and I was able to be registered and it was not a struggle for me to get residence.”

Participant 8 further pointed out how their difficult their transitioning journey was:

“Oh okay. [clearing throat] ... At first, I can say that the feeling was exciting because I was from high school to university and studying for a career that I always wanted to do, but there were challenges such as funding, a place to stay and no friends at the university. I was scared to be part of the university since there were lot of people there, diverse cultures and race. And in my field of study there were less people who were Zulu it was mostly Indians, and it

was difficult for me to easily adapt to university environment, but my journey was exciting but with a lot of challenges.”

Participant 3 highlighted that:

“Well, what I can say is that it was quite a difficult journey for me because the teaching style was different from what I was used to in high school, but it was not too bad as I was fortunate enough to have people to assist me to quickly adapt to the university environment.”

Students transitioning process may be accompanied by lots of feelings and emotions some may experience anxiety and fear of being alone. Online learning can be accompanied by feelings of isolation. However, the research findings pointed out that as much as students may find or experience the transition journey difficult but still, they do not experience the same difficulties in their transition journey.

Participant 1 additionally highlighted that:

“Oh okay...[uhm.] having to transition from high school to university bearing in mind that we are having covid-19 and it had deprived me a chance to experience university life. Having to switch from traditional class to online learning it was a difficult journey for me. I remember in 2021, I was doing my first year then it was really hard for me I needed that someone who will be there for me and guide me. I really felt alone, I had to everything alone. Having to switch from something I known I had resistance towards online learning, I thought that the transition will mean that I am alone. I remember that I posted on my WhatsApp status saying that when it was my turn to experience university life, the university is against me [soft laugh] I am not enjoying my transition journey.”

Furthermore participant 2 highlighted that:

“Well [uhm] it ... I will not lie at first it was really difficult since it was my first time doing online learning and I had no clue about most of the things but as time went on, I got used to it and it is much better now than the first time I got here.”

Transition journey experiences they differ from one person to another no journey is experience the same. It can be argued that transitioning process is a subjective experience. This was noted on participant 4 statement that pointed out that:

“I went from full contact in high school experience where we were taught in contact classes and what not. Then I went to Rhodes in 2020 the beginning of February and I was there for a

couple of weeks then covid hit and I had to come back home and from 15 march 2020, I have been studying online and while I was at Rhodes university I managed to do 2 tests obviously lectures were face to face then and when I came back home during lockdown everything went online and it was different than being taught face to face, then I transferred to UKZN beginning of this year and it was different interactions, lectures were conducted differently it was not what I was used to maybe that's because I'm a third year student [soft laugh] But it was different from what I am used to and that's because classes are held online."

Participant 7 further noted that:

"My transition was not what I was expecting. That because [background noise disruptions] ... if you are person who watches a lot of series and movies that portray university life you will find that the real university is different from what is portrayed in those movies. In movies or series, they portray the transition to be difficult and hard but as for me I found that my transition was manageable and doable it was no different from high school."

4.3. Students experiences of Online learning.

Online learning was first introduced to students in the year 2020 as a form of emergency learning to avoid disruptions of academic classes at tertiary institutions, and since then students have different experiences with regards to it. Different people have different views about online learning. Participant 2 pointed out that:

"[err...] at first, I will not lie it was really difficult from high school to varsity and you get to realise that you have to study online, and you have to attend classes using zoom and I had no idea of what zoom is and how to use it. I had no idea what outlook is but with the help of my peers and other people they taught me how things are done and how to attend classes, I got used to it and I got the hang of things. I will not lie it is much better now. I have gotten to use to it."

Participant 2 further outlined that

"[well...] ...I will not lie it was a really hard and sad moment for me. Concerning that I was coming from rural areas, and I had gotten to this city, and I had to adjust to the environment, to online learning and people here. But it has taught me to be independent."

Furthermore participant 3 pointed out that:

“Although there are some difficult but when the first case of covid-19 was reported I was doing matric in 2020 remember and the teaching and learning had to be stopped immediately so teachers introduced online learning to us so when I got to university it was not that difficult as I was familiar with you know.”

Adding on to what participant 1 and 3 pointed out about their experiences of online learning participant 6 also shared the same sentiments with regards to online learning experiences as they highlighted that:

“It has become hard from contact to online learning in terms of understanding the content, simply because [err..] in contact learning we were attending classes and if you were not understanding something you could go and ask the lecturer about what you are not understanding at that time but now if you don’t understand something you have to send an email to lecture and sometimes you might get a response or not all. So, it is really hard in terms of understanding the content yeah since we are doing engineering some of the problems cannot be explained via email it requires a person to be next to you so that you can fully understand.”

Participant 5 further pointed out that:

*“What I can say is that everything changed suddenly. Just when I had adjusted and understood how everything works out how lecturers operate then **kwamele ukuthi ngiqale phansi ukufunda** [I had to re-learn how to study online] another thing such as learning online, I will not lie it was difficult. Were sent back home and I had difficulties as the learning environment was not conducive. I struggled with connection issues, loadshedding for an example let us say I had a test at 9’oclock then loadshedding happen as a result I miss my test, so I won’t lie my experience of online learning was not great.”*

Research findings highlights that covid-19 did not only affect how teaching and learning will be conveyed but is also affected how students experience and get a feel of what university is all about. It limited students’ social interactions.as,

Participant 1 pointed out that:

*“Okay what I can say in simple word is the fact that is I do not know what university life is. My experience of what is a university life when compared to people who actually had an experience of university life is actually limited in a way **yokuthi** [in a sense that] its boring. First of all, I do not know what university life is. In my perspective it is really boring from*

what I have seen from the movies and from what I have imagined its boring. For instance, my sister would always tell me about her experiences of university life and from that I could tell that my university life experience is boring and limited. Since we are learning online my daily routine entail getting behind my pc and log on to learn site, so in a sense that is my university life I am always behind my pc.”

Additionally participant 6 further pointed out that

“Yes, it has deprived me greatly because it is not easy to get into contact with other peers and that’s because most of my peers don t come to campus now since we are studying online, we only get into contact via social media platforms, and you don’t really know a person face to face.”

Furthermore participant 5 highlighted that:

“Yes, because when covid-19 happened it was difficult for me to learn new people I only know people I had known prior covid-19. Even when we got a chance to return to campus residences due to learning challenges, we face at home still I do not go to campus and socialise with other people since I can study at my residence.”

Additionally, participant 4 argued that social interactions were affected as a result

“[Uhm]. now I am finding it [what is the word] It is different and weird because you do not get to socialise with your fellow peers. you do not even know what the students look like [uhm] you do not get to know them personally even though you are in the same lecture you only know them through texts.”

Research findings also pointed out that how students experience online learning is a subjective experience. As some of the participants shared difference sentiments about how they have experienced their university and how their social interactions were affected because of covid-19 and online learning. as participant 8 pointed out that:

“For me I cannot say that it deprived me because since I am studying online most of the time I am with my classmates. For me I experienced both contact and online so during online learning I am always with my peers that I knew prior online learning so I would not say that online learning hindered my social interactions.”

Research findings have showed that with different experiences to online learning. Those who initially had difficult experiences of online learning as they adjusted to it. Their experiences improved as some have indicated that they are enjoying online learning as compared to when it was first introduced to them.

4.4. Challenges of online learning experienced by students

4.4.1. Network issues and technical issues

Effective e-learning appears to depend heavily on having access to the internet, yet this is impossible if students have little or no access. According to Van Lancker & Parolin (2020) there is no mode of teaching and learning that has no critics or challenges furthermore, Al-Balas et al., (2020) argue that students from low-income households will have difficulty gaining access to the internet and the basic devices necessary to participate successfully in online learning, and students have experienced these challenges of online learning, It emerged during the research that, in spite of online learning seeming to be one of the best ways of learning during the COVID-19 period, the innovation is hampered by the unavailability of connectivity in some rural contexts

Additionally, the success of online learning for students depends on them having consistent internet access. Berge (2005) expressed concern about the gap in digital readiness and how different countries' pedagogical approaches can affect students' online learning. The use of electronic equipment by students may also be impacted by technical difficulties. According to (Barbour & Reeves, 2009), students must possess a high degree of digital literacy in order to locate and utilise pertinent information and interact with people online. Students who lack this skill may find it challenging to learn online.

as participant 1 pointed out that

“The threats I have faced with regards to online learning they are so many but the major threats I have faced has to be technical challenge, having to write tests using my PC I will be so frustrated because internet connection was a struggle for me as a result, I was not able to successfully write my tests. Another challenge has to misplacing my documents or my files getting deleted and having to miss tests or having submission struggle on Learn.”

Participant 5 further pointed out that:

“While I was at home during lockdown my environment was not conducive for me to learn as I was struggling with internet connection and at home there were disruptions, Sometimes there is a need to go to libraries and at home library is very far and you are at risk of getting mugged especially phones and laptops, another threat is that time is limited in online learning as a result you don’t get enough time to read the question properly when writing a test.”

Additionally participant 5 highlighted that:

“Online learning has its own challenges no matter how much you try to avoid those challenges, such as loadshedding, network connectivity, non-conducive environment let us say you are having a presentation and you are at res the environment is not conducive.”

it is valuable for students to have access to modern physical resources like laptops, smartphones, Wi-Fi routers and others in order to enhance e-learning, but affordability to possess such resources remains a question because of social divide (poor socioeconomic background). Thus, this remains the burden of the university to provide modern physical resources to students for successful e-learning. In other words, traditional physical resources like textbooks, module/course packs, and other hardcopies can act as an alternative pathway in case students have no internet access.

Participant 8 further highlighted that:

“firstly, I struggled with network issues as online learning forced us to study from home and my home environment struggles with network as a result of that I could not download learning materials and often times I struggled with test submissions or assignment another struggle was loadshedding and this made it difficult as when there is no electricity the network reception becomes bad, Another challenge faced was data costs it is quite expensive to hotspot your laptop to your phone as it consumes a lot of data that is why I ended up relying on my phone only so that I can save data because I could not afford buying data. “

Additionally participant 7 highlighted that:

“[heavy sigh]. well to be quite honest there are lot of challenges that comes with online learning firstly it is network issues I struggled a lot with network issues and some of the lecturers do not understand when your submission is late, you see I am from Eastern cape

from the rural areas to be specific and to be honest the network connectivity there is quite bad and sometimes I was required to go to the mountains away from my house so that I can get a better connection and that was a struggle because it was not safe I risked being hijacked of my devices. So, I was left behind with my studies more especially the lecturers refused to post content on time, so it was a struggle. Another challenge was issues with data cost the data provided to us is not enough and connecting to zoom for lectures for about 1 hour 30 minutes uses a lot of data additionally the content uploaded on learn by the lecturers uses a lot of data when you are downloading it and you often find that the data provided to us gets depleted fast and you have to use your own money to buy data and data is really expensive.”

The issue of network issues was common to participants as the research found out that most participants struggled with network issues as participant 2 further indicated that:

“[Mhm]. Well, I can say that the challenges faced of online learning were network issues as a result I would miss classes and submit late sometimes I would not successfully participate on an online test because I would lose connectivity in the middle of the test so I struggled a lot with network, another issue would be the technical side of zoom as it limits a certain number of participants.”

Additionally participant 3 highlighted that:

“I can say that network issues were a major challenge for me because of it I miss classes and my submissions are not on time because you would find that I encounter challenges with submission and my submission would not go through on time and I would ask the lecturers to grant me extension and sometimes some lectures are not understanding.”

Lastly participant 6 highlighted that:

“I would miss tests and classes because of network connectivity and when you miss classes you miss out on a lot of content covered and the lecturer will not go back just because you missed a class so that was stressful.”

Additionally, Participant 3 pointed out that:

“[Well]. I would the say the issue of internet connectivity, network issues and Wi-Fi being down as result sometimes I miss classes or submit late.”

Participant 6 further pointed out that:

“When we are writing tests there maybe be connectivity issues and you won’t be given a chance to explain what the problem was? you are only allowed to write the make-up tests of which it covers the whole module content, and it is not easy to pass.”

The research also found that the issues of data costs and network issues affected those who come from underprivileged backgrounds and those who are privileged they are less likely to suffer from technological issues. As participant 4 highlighted that:

“For me I had no challenges of online learning more especially technological issues, as I do have access to devices such as laptops and I have Wi-Fi at home that is unlimited and I can successfully download the materials online without a hassle and the network in my area is excellent so I won’t lie and say that I struggled with technical and technological issues more especially because I am familiar with how to use technology.”

Research findings also showed that other challenges associated with online learning is that students miss classes because of zoom limitations. As participant 2 pointed out that:

“Online learning has lots of challenges for an example we attend classes via zoom and zoom has a limited number of 300 students and if you did not couldn’t join the class 10 or 15 minutes earlier you have to listen to the recorded session as much as its help, but it is not the same as attending and hearing different opinions from other students and having that online interaction with the lecturer.”

4.4.2. Lack of learning devices

For effective and successful online learning, students are required to have access to technological or learning devices such as laptops and the failure to have access to one results in a challenge to participate fully in online learning and the research found out that students noted the lack of technological devices as one of the challenges that they encountered when they were required to participate in online learning. Technology is a huge source of concern since students may not be able to download updated software because it requires a more powerful computer, which impedes their ability to learn. The learning process is significantly influenced by socioeconomic circumstances. Low socioeconomic class students depend on the technology and software that the institutions provide in order to understand and finish academic assignments. Students who lack the necessary gear and software will struggle with the required online platform and fall behind. Participant 1 pointed out that:

“Well I do have a laptop but it’s like I don’t have it because it is broken so this became a challenge for me because I would sometimes use my phone when my laptop starts acting up because it has a tendency to stop working randomly and this was a huge challenge because it would stop working whilst I am in the middle of a class or maybe typing an assignment so when were sent back home I relied on my cell phone mostly but that is a challenge on its own because I get easily distracted by messages popping up.”

Similarly participant 2 pointed out that:

“I am a first year student and when I came to university I did not have any devices such as laptops , I expected that NSFAS will provide me one but that was not the case because even right now I do not have laptop because the rollout of laptops is delaying so I rely on campus LANS and borrowing peoples laptop that becomes a challenge because you may find that I have to use my phone to attend classes and I have to travel to campus so that I can type assignments and that is really draining and daunting so not having laptop was a struggle for me and I felt left behind on my studies.”

Participant 5 further highlighted that:

“Well my laptop is very old and in order for me to be use I must connect it to the charger and if it is not connected it is as good as dead because it does not work so this became a challenge when I would experience loadshedding then I would not be able to continue with typing my assignments even when there is no electricity, and this is a challenge because I felt like work was piling up because of my laptop that is not in good condition as a result I cannot partake fully in online learning.”

Furthermore participant 8 highlighted that:

“[Mhm...] another challenge that I faced was the lack of technological devices such as laptop and this became a struggle because I relied on my phone to do assignment and that is a struggle because my phone does not have large storage to store all the learning material that I download, and it is very difficult to type an assignment using a phone.”

Research findings also found that participants who had access to learning devices such as laptops they encountered little challenges when it comes to participant fully in online learning as participant 4 highlighted that:

“Well, I will not lie and say I struggled with having access to learning devices for me I do have a laptop that is in good working condition, and I use it to attend zoom classes and type my assignments, so I did not really struggle much”.

Similarly participant 6 highlighted that:

“I won’t lie I do have access to learning devices such as laptop and my laptop is still in good working condition the only thing, I struggled with is network but with access to learning devices I do have one, so I did not fall behind on my schoolwork that much”.

Additionally participant 7 pointed out that:

“I did not feel like I was left behind in my studies that much because I do have a laptop, I would always make sure that I download all the learning material such as recorded lecture sessions, slides etc that I will need and study at my on time even if I have loadshedding, so I did not struggle that much”.

4.4.3. Lack of understanding of how online learning works

It is very important that both students and lecturers understand how online learning works because the lack of thereof causes challenges that prevents effective and successful online learning and this research study found that students also struggled with understanding how technology and online learning works as a research students did not adjust fully or successfully to online learning. When classes are conducted online, digital proficiency is a prerequisite. This relates to both teachers' and students' abilities to use a digital environment, including using the graphical user interface, comprehending audio-video settings, and compiling their projects in the required software. Students in higher education risk falling behind if their digital proficiency is insufficient to meet the expectations of the fast-paced online learning environment.

Participant 2 highlighted that:

“Well at first when it all started, when the semester started, I missed a lot of classes due to that I had no knowledge about zoom is and how to download zoom, I had no idea what outlook was and how I will receive email, so it was really challenging, and I really missed quite a lot of classes.”

Similarly participant 8 highlighted that:

“[Well...], I can say that the challenges of online learning are the lack of knowledge and understanding of what online learning is, because for me I was used to contact learning and now having to transition from it to online learning it was quite a challenge.”

Furthermore participant 1 pointed out that

“Not knowing what online learning is and also how technology works was a struggle for me because I would encounter challenges when I am submitting my assignments on Moodle that was mainly because I did not know how Moodle functions so this was a huge struggle and I had to teach myself how these things work”.

Participant 5 further highlighted that:

“I am from the rural areas and the school that I attended was very underprivileged and I was not equipped with technological skills so I struggled a lot with technology and how to use it so it was a huge struggle when covid-19 hit I would struggle with downloading and uploading my assignments because I do not have knowledge when it comes to technology and because covid-19 pandemic forced us to study from home I was really challenged , I would also miss classes because I was struggling to connect to lectures via zoom”.

Participant 3 also highlighted that:

“[laughing], I struggled a lot with regards to technology. I failed to understand how zoom works and I couldn't use it at first because it was my first time using zoom so I would either join late or miss classes altogether whilst trying to work my way around zoom, I remember in one lecture I couldn't mute my mic and video and the lecturer kept on asking me to mute myself and I couldn't that was really embarrassing, I had to lie and say that my laptop is acting up [loud laugh], so my lecturer muted me so that the lecture can continue without any interruptions”.

Research findings also noted that if one is well equipped when it comes to using technology, they would not encounter any challenges and for these people effective learning is ensured as participant 4 pointed out that:

“I am very equipped when it comes to technology so adjusting to online learning was not difficult for me as I am familiar with how technology works so I did not miss any class, I did not have challenges downloading learning materials and uploading my assignments on Moodle”.

Similarly participant 6 highlighted that:

“I am familiar with technology, so I did not struggle much when it comes to using zoom and attending classes”.

4.4.4. Lack of self-motivation and time constraints

Online learning affects students learning motivation as they assume that they have all the time on their hands and the research findings also showed that challenges of online learning are associated with the lack of self-motivation and time limitations. As participant 5 pointed out that:

“Uma ngingafuni ukungena I class coz ngiyanqena [If I do not want to attend the class because I am lazy], I do not attend and to be honest I feel like online learning ingibuyisela emumva [is bringing me backwards] because there is no information gained because sometimes, I would attend the zoom class and continue with whatever I was doing. Whereas in contact learning ngizobe ngibhekene [I will have contact interaction with the lecturer] ne lecture and jot something down, I will have a reason to wake up early and go to campus to attend classes.”

With regards to time constraints as one of the limitations or threats associated with online learning. Participant 5 highlighted that:

“In online learning time is very limited, let us say you are writing a test you do not have enough time to understand the question properly, so you end up rushing the test because you want to cover time.”

Participant 1 further highlighted that:

“Another problem is time management, because I know that I’m studying online I will procrastinate and push my work and tell myself that I will do it after an hour or end up not doing it all, lack of self of motivation is a challenge for me because there is no one to guide me.”

Additionally participant 1 highlighted that:

“Not having someone or a tutor or even people you are doing the same course with, in front you, [uhm.] sort of encouraging you, it is so hard to have motivation and if I fall behind, I sort of become frustrated at myself and have feelings of giving up.”

Furthermore participant 4 highlighted that:

“You get like if you have contact learning, you are forced to actually learn because the person standing in front of you and making you learn, whereas online, then you could be like, No, I'll just do it later, or you might end up not even doing it.”

Additionally, participant 6 highlighted that:

“In online learning when you are attending there maybe connectivity issues and lectures refuse to post what they have been teaching, they say you must attend and if you did not attend you did not see it as important, and they do not understand that some of us are facing connectivity issues. And when we are writing we also face connectivity issues and when you are submitting you run out of time and they do not give you a chance to explain what the problem was, you are only given a chance to write make-up tests which is not easy to pass.”

The presence of a wide range of distractions makes it highly likely that students will be distracted when utilizing the internet as a learning tool. Research findings also showed that online learning is also associated with lots of distractions that hinder online learning to be more effective, as participant 7 pointed out that:

“Ziningi izinto eziku distract uma ufunda online kungangena umuntu lana endlini yakho uphazamiseke ugcine usu distracted kuningi okungaku distract ugcine u lose I focus. Yeah, kuningi nje okokuphazamisayo akufani nokuba seclassin ngoba nonke suke nize ngokuzofunda [there are a lot of things that can distract you while you are studying online, someone might barge in into your room and you became distracted and you lose focus, there is a lot that can distract you unlike being in the contact classroom whereby you all have the same purpose of learning].”

Participant 8 further highlighted that:

“With the amount of workload that is given to us on a daily basis one ends up losing motivation because of stress and anxiety, because the lecturers bombarded with a huge amount of workload just to cover lost time, so this resulted in me losing motivation as I was doing my work with the sake of doing it not just because I wanted to learn something additionally we did not get time to actually learn and grasp the content learnt but we were striving to meet deadlines on a daily basis.”

Additionally participant 2 highlighted that:

“With online learning you do not a motivation to study because every information is in front of you, and you become lay even if you have an upcoming tests but because you know in online learning you are offered an opportunity to attempt the test without actually learning for it because all the resources are in front of you during the test and you can even write the tests in groups.”

Lastly participant 3 highlighted that:

“For me online learning led me to procrastinate a lot for instance. I would tell myself that I would study a certain module on a specific day and time but end up not doing what I had told myself that I would do because I was demotivated by the fact that it does not matter even if I study because some students can write the test without studying for it and they still pass.”

4.4.5. Loss of Human interaction

Human contact is also being lost. Computers cannot replace human interaction and relying on them too much reduces social activity. Group work, group presentations, and group assessments in collaborative learning tasks make the participation hurdles that external students may encounter very clear. Some of the problems encountered can be personal, such as: technology-related nervousness; being uncomfortable; (perceived) unfair assessment, especially in "group" assignments; and (perceived) difficulty in peer interaction, especially in presentations. Despite the teaching staff's best efforts to give all pupils fair and effective learning opportunities, when it comes to the online learning environment provided by various Learning Management Systems, this might put learners in an isolated situation where they may also have diverse levels of skill and proficiency with different forms of IT (LMS)

Research findings also pointed out that online learning is also associated with the loss of human contact as online learning encouraged individuals to be behind their personal computers most of the time. Loss of Human interaction can be explored as a lack of individual social interactions as a result of covid-19 and online learning. Participant 4 pointed out that:

“It is maybe [what’s word] It is like, it is not much like between the lecturer and the student. There is not much going on between them. It is just like the lecturer’s upload something and

you just do the work. And if you have any problems, you either ask the class rep or you will send the lecturer emails. There is no communication or whatsoever.”

Participant 2 further pointed out that:

“As much as the lecturers allow us to send them emails and ask for one on one classes and help you but it’s not the same as seeing the lecture standing in front of you and having that interaction with your lecturer, it’s not the same as contact learning I feel like online learning deprive us the chance to interact with our peers and lecturers.”

Additionally, participant 7 further pointed out that:

*“Yeah, my social life is totally affected by online learning because more than 50% **wabantu engifunda nabo angibazi ngamagama, abancance ngibazi ngokubabona ngoba sihlangana nabo ema lab uma siyokwenza ama practicals ngoba. [err] ukuba kuthiwa besenza I contact learning ngabe kulula ukwazi abantu ofunda nabo manje lana kwi online leaning abanttu awubazi wazi nje ukuthi ubani ujwayele ukubuza kakhulu e classini. [more than 50% of my peers that I study with I do not know them even by their names, I only know few of my peers and those that I know are the ones whom I usually meet at the laboratory if we have practical’s, if we were learning using contact learning it would have been easier to know my peers that I study with but with online learning you do not get to know people you only know who usually asks questions during lecture sessions], so, [yeah] my social interactions has been affected.”***

Participant 1 further highlighted that:

“Well for me I would start by saying university life for me it is boring, I did not get a chance of making friends and socializing. My lecture classes are a tedious process I am always behind the laptop I do not know the lecturer face to face I do not even know my peers face to face, the struggle is that one cannot even form study groups because we hardly go to campus. If we are being honest online learning deprived us that chance of having social interactions with our peers and lectures and that is why I say university life is not what I always imagined it to be it is really different from what is portrayed from the movies and so forth. I can also say that online learning is not accommodative of students with different learning styles more especially those who grasp information better when there is a lecturer in front of them.”

Additionally participant 8 highlighted that:

“I would not really say online learning affect my social interactions because I had made friends prior covid-19 and I knew my classmates as well but the only issue I struggled with was to adapt from having a lecturer in front of me to studying everything by myself and that was a challenge because some of the engineering modules are understood better when they explained practically.”

Participant 5 highlighted that:

“My social life was affected because even though there are some people I knew prior covid-19 and online learning but I do not get time to socialize because I am always in my residence and there is no need for me to go to campus because we are not attending classes contact but the main struggle was to get hold of the lecturers it is not easy as before whereby you can just pop in the lecturer office during their consultation times now you consult with the lecturer via emails and sometimes it is not easy to understand written information.”

Participant 3 shared the same sentiments as the other participants with regards to loss of human interaction by highlighting that:

“Online learning did deprive me of my social life now I am not able to socialize with my peers and have that human interactions with my lecturers and tutors because online learning has forced us to communicate vial online platforms which is not the same as having face to face interactions you do not really get to feel another person sense of warmth because online platforms are just impersonal and cold.”

Lastly participant 6 highlighted that:

“Well for me [pause.]. I can say that in some way online learning deprived me of my social life even though I had made friends prior online learning but it is difficult to have that face to face interactions with them because online learning forced us to study from home and restricted our access to campus and the only way we can have group discussions it via WhatsApp calls, texts or zoom and that is a struggle because some of them end up not joining to network issues or other commitments.”

4.4.5. Increased workload

Online learning was introduced as form of emergency learning because the institutions wanted to avoid academic disruptions and the research found out that with the

implementation of online learning this created another challenge to students as participant 1 pointed out that:

“Another challenge that I faced was increase in the workload load, in this online thing I feel like we do not learn but it is all about submissions after submissions and one wonder where do we get time to study because we are submitting.”

Similarly participant 8 highlighted that:

“I feel like this online learning was to cover the time lost in 2020 because there has been an increase in workload for instance, I would be submitting assignments and writing tests in consecutive days it like our aim is to meet deadlines not to study on the other hand you are expected to study and also submit an assessment that is really challenging because as student you end up not knowing what to prioritize.”

Furthermore participant 5 highlighted that:

“[heavy sigh], this online learning is here to kill us like honestly each and every day we are submitting something on the other hand we are expected to attend classes our study schedules are really tight.”

Participant 3 pointed out that:

“Lecturers just bombard us with huge amount of workload, everything lies on our shoulders, and I won’t lie the workload is too much on us as students”

Participant 2 highlighted that.

Sometimes I feel like crying because the workload weighs heavy on me, and I am not used to such amount of workload at some point in time I wanted to deregister because I felt like I am losing my mind and I believed that university is not for me because I could not cope the pressure of submitting and writing tests every day.”

Additionally participant 4 pointed out that:

“I really struggled with the amount of workload more especially since I am a transfer student and I don’t have an idea how the lecturers structure their assessment and also what they expect from students when each and lecturer gives us amount of work to be done, I was challenged a lot, even when we took online tests, I did not know what to expect because I am completely clueless”.

Participant 7 further pointed out that:

“Online learning came with a lot of demands especially academically, my course is demanding on its own now with the amount of workload upon me it was really challenging because I had to maintain the balance between my studies however that was impossible because each and every module give us a huge amount of workload such as assignments, tests now it was the matter of meeting deadlines, so I really struggled a lot with that”.

4.5. Impact of online learning on students’ academic performance

Online learning has impacted students’ academic performance differently as it has been noted that students who struggle to successfully adjust to online learning due to various constraints such as technological issues, Network and data cost issues, Loss of human interaction. participants have reported that they have experienced a negative impact on their academics as participant 2 pointed out that:

“Yes, it did affect it, [well...] with regards to assignments we were given the assignments and the lectures did try to explain the assignment, but it is not the same as having the lecturer next to me or discussing that particular topic with my fellow classmates which will make the assignment more understandable since I am a first-year student.”

additionally, Participant 5 highlighted that:

“Yes, at first it was affected I cannot lie, but as the time went by, I was able to improve because I was starting to get used to online learning and I improved on my academics.”

furthermore participant 6 pointed out that:

“[yeah], it has been affected negatively, as I did drop in some of the modules as most my engineering modules cannot be taught online, they require physical interaction between the lecturer and the students. Some of my modules require practical explanations for an individual to fully understand the content of that particular module. so, because of the modules not fitting the current teaching method, I dropped in some of my modules.”

Additionally participant 7 highlighted that:

“My academic performance was affected at first because I struggled with adapting to online learning as a result, I dropped in some of my modules and even though tests are conducted

online one would expect that they will pass because all the information is in front of them but that is not the case because lecturers set the tests in the most challenging ways.”

Online learning affects academic performance of students, and this has been proven by the research findings as they also show that online learning has also affected students' performance both negatively and positively. Participant 6 highlighted that:

“Yes, it has been affected negatively as I have dropped in some of the modules.”

Additionally, participant 8 pointed out that:

“Online learning is better in way that my marks have improved, and I have gained better knowledge in terms of using technology.”

Participant 4 further pointed out that:

“I think in some ways it has been affected in some ways that has not been affected, because in the beginning, I wrote only one or two Tests while I was at Rhodes, the beginning of February and March 2020. I did well and the other one I did like average net and the same has been happening with online learning, with most of my subjects being what is being[mhm] essays, the essays are harder, because you do not get the same support of writing an essay in how to do it because it is a lot different than when you were in high school. So, in some way, I think in some modules, it was affected, but I do not know if it was just a transition from high school to university or was online learning.”

Lastly participant 3 highlighted that:

“Well, my academic performance was not really affected by online learning because for me it's the matter of studying and not studying, obviously if I study, I will produce satisfactory results but when I do not study because I am lazy or demotivated then I will produce unsatisfactory results.”

For some students online learning was a way for them to improve their academic performance as they found online learning much easier than contact learning, they were able to understand modules much better when they were taught online rather than been taught contact and the method of assessment that is used in online learning is much better for them as a result, they improved their academic performance as participant 1 pointed out that:

“Yes and no, at first it was slightly affected but I quickly adapted, and I studied hard and in my surprise my marks improved, and they are even higher than I anticipated. online learning

assisted me to be more independent and I put more effort in my studies because I know that everything is all is on me.”

Furthermore participant 8 highlighted that:

“Uhm... well I can say that online learning affected my academic performance positively because my marks improved compared to contact learning.”

4.6. Benefits of online learning

4.6.1. More flexibility

Digital technology is used in online learning, and it has many other uses. It is employed for administrative and academic tasks. It has the power to break down the barriers to education created by time and space. Additionally, Online learning give students the chance to express their ideas, become more self-reliant, and have access to a more flexible learning environment. Due to a number of advantages for students, including time investments, cost savings, and flexibility, online programs are seen as effective modes of education during the COVID-19.

Furthermore, Flexibility is a significant advantage of online learning. For instance, traditional distance learning makes extensive use of paper-based resources. In addition to material, interactions are sometimes accomplished through phone conferencing. In recent years, video conferencing has become more popular. However, this technology has never been very popular because it is pricey and rarely interactive. Additionally, since these e-activities are asynchronous in nature, learners have more freedom on when to participate and more time to assimilate the information before responding. Online learning is associated with benefits such as flexibility, autonomy and research findings have proven that as much as online learning is associated with lots of challenges but there are advantages associated with online learning and the most prevalent benefits highlighted by participants is that it offers flexibility as participant 4 pointed out that:

“Yes, they are. You can if you are disciplined, you can manage your time and you can learn time like time management and how to work on your own basically at your own pace. Yes. And. You have more time, basically, than if you had to get to attend lectures, because if you were attending lectures, you would attend the lectures that you would come back and then

you would make your notes and whatever. But now we go online, and you can make your notes while the lecture is going on.”

Additionally participant 6 pointed out that:

“[Mhm] ... yeah, it has some benefits due to the fact that they do post the lecture recordings so we can go back to it at our own time and understand, yeah, I can also study at my own pace.”

Similarly, Participant 1 further highlighted that:

“Well for me the only benefit of online learning is that it offers one with flexibility of studying at you own time and pace but bother than that there aren’t many benefits of online learning.”

Furthermore Participant 3 stated that:

“I can say that online learning was beneficial to me in terms of flexibility as it offered me with an opportunity to do things in my own time for instance, I can log in to the lecture session via zoom and continue with my other commitments because I know that after the class the material will be provided via learn for me to access and study when I am less swamped.”

Lastly participant 7 highlighted that:

“The benefits of online learning that I experience was that even if I miss classes due to network connectivity issues I can still later on be able to find the recorded session on learn 2022 and go through that material at my own time, secondly I can attend the class even when I am in the taxi, I don’t miss out on anything.”

As much as online learning has its own challenges and benefits but it has been shown by the research findings that online learning can be used as a tool to advance individuals technologically as it equips them with skills that are needed in the workplace whereby technologically savvy graduates are needed therefore online learning produces high skilled graduates that can think technologically as participant 8 pointed out that:

“Online learning is better than contact learning because online learning gives you a chance to study in an advanced way, and you are able to study at your own time and pace for an example when you have an emergency during the class you can leave the class and attend to your emergency , you are not missing out because you do have the lecture recordings provided, additionally since we are in the 21st century , online learning gives you a chance to

be exposed to what is happening in the real world as in the real world interviews are conducted online.”

Research findings also pointed out that some students did not find online learning beneficial to them as Participant 5 highlighted that:

“Well, for me honestly online learning has no benefits because it might happen that we will finish our studies and graduate but in we did not gain any knowledge because online learning spoil us it does not give you a desire to gain new information by studying. For instance, when we are writing a test, I can attempt the test without studying and still pass it, but this is a disadvantage because when we get to the workplace we will be required to relearn because we will be just graduates who do not know anything about their field of study.”

Additionally participant 2 highlighted that:

“For me well [pause]. I can say that there are no benefits of online learning because for someone like me who come from rural areas and has no idea of how technology works and I was used to having a teacher in front of me, now coming to university and having no lecturer in front of me that was a challenge more than a benefit so I would not lie online learning has not been of any benefit.”

4.7. Forms of support offered to students

Forms of support can be explored as the assistance provided to university students by the university to assist them to easily adjust into online learning. And the research findings show that there are different forms of support offered by the university such as extra classes/tutorials, data provision, counselling sessions and the university students find helpful. As participant 8 pointed out that:

“Yes I can say they do, the university or rather the lecturers gave us the equipment’s to or for better understanding of online learning and also to move from traditional to online learning, because the meeting or rather classes that were conducted were posted on Moodle and they were always welcome and available as they gave us the chance to email them with any queries and they additionally created WhatsApp groups for us to have faster way of communicating with them.”

Participant 2 further pointed out that:

“Yes, classes before classes first commenced, we had an orientation that taught us how online learning works and they also post lecture recordings to accommodate those who could not join the class due to zoom limitations and they also offer us chance to have one on one consultation sessions and they also provide us with extra classes to assist us with better understanding the content taught to us. The university, each month the university provides us with data so that we can be able to attend classes and we do not fall behind and for me these forms of support are helpful ad they are enough.”

Additionally, participant 3

“Yes, they do offer, in my opinion the university offer one of the best forms of support one can offer to is students more especially the likes of tutorials and they are helpful. Tutors have patience, and they also offer us counselling sessions whereby they support us emotionally they even support us even with non-academic related issues. [uhm] there is also SRC they also assist with any issues with encounter, and they are quite helpful.”

Additionally participant 4 highlighted that:

“Yes, there is. If we have a problem, we can ask them to have a consultation with us. The one lecturer. And when I first started, I was a bit late to register because my credits were still being transferred, and so I did get some time to adjust to coming to UKZN. I did get some leeway in the beginning.”

Furthermore participant 6 highlighted that:

“Yeah, some of them do ask us how the connectivity issues are. [yeah]... they do ask us some of them, but some do not care. Some of them do help us, they do understand that we are facing connectivity issues and they can allow us to submit about 24 hours so if you are facing connectivity issues you get enough time to submit as you can submit in the period of 24 hours given.”

Participant 7 further asserted that:

*“Yes, they do provide support. [err] they provide support in the form of a tutors and yeah, I find many of the tutors helpful because they give you additional problems to do which help you to better understand the module. Last year **bekukhona ne counselling la okhuluma khona ngezinkinga zakho kodwa kulonyaka uyayi applyayela njengawo wonke umuntu***

[there were counselling sessions where you are able to talk about your problems, but this year you must apply for it just like everyone else] it is no longer compulsory.”

Additionally participant 1 highlighted that:

“Yes, we were offered support such as data being provided to us monthly and we were also offered with options of having one on one consultations with the lecturer and tutors and when I was doing my first year, we had orientation and that sort of helped me adjust a bit to online learning and ease my anxiety and frustrations.”

Lastly participant 5 pointed out that:

“The university and lecturers do offer us support more especially lecturers as they are lenient and patient with us, they do understand that we struggle with network, and some are still struggling with adjusting to online learning. Some lecturers give us extra time for assessments tests, and they also provide us with make-up tests if you failed to write the first test. The institution provides us with academic support in terms of counselling and they go beyond taking care our academic needs but also our psychological needs.”

4.8. Coping strategies used by students to cope with online Learning

The research findings highlight that students also have roles to play to ensure that they cope effectively with the challenges of online learning, and this is highlighted by participant 1 when they highlighted that:

“Well... I would not lie studying and learning under the global pandemic was really frustrating and challenging but to ensure that I do not fall behind on my schoolwork I made sure that I put in extra hours in studying like I would study all night and also the forming study groups were helpful because the workload pressure was eased a bit. Lastly, I am spiritual person so prayer and watching motivational videos assured me that I can do this despite the challenges”

Similarly participant 2 pointed out that:

“Since I am a first year student and I have not made much friends or rather have a chance to form study groups with my peers, well for me I can say that to cope with online learning, I relied mostly on the few people within my residence to teach me how to manoeuvre

technology and also I studied every day to ensure that I do not fall behind, secondly utilized the opportunity offered to us by lecturers of consulting and also, I do not skip attending classes and I found that helping because I do not have to worry about what was learnt in class, I simply add on to that information when I am studying and [oh well..] I also formulated a study timetable to ensure that I do not procrastinate a lot [Laughing].”

Participant 3 further pointed out that:

“To be honest it is my responsibility to make sure that I study and pass and not put it into mind that online learning is hard because at the end of the day I am the one who will obtain the degree not the institution so to answer your question I changed my study approach by adding extra hours and I also utilized the concept of studying smarter not hard and also having peers who do the same degree with me eased my anxiety of online learning a bit because with them we would study together through WhatsApp video calls share information with each other.”

Additionally participant 4 highlighted that:

“Well for me fortunately I have my parents support and friends who encourages me to study and at home I do not do any chores because I follow the lecturer timetable through and through so attend classes throughout the day and at night I study and also I found that formulating a study time table and prioritize the list of things to do helps me to keep focused and avoid procrastinating and since I am in the module WhatsApp groups if I do not understand something I simply ask them.”

Participant 5 further pointed out that:

“Since I am a final year student and I want to graduate next year so to cope with online learning more especially the workload I study with people who are doing the same degree as mine and whenever we have an assignment or a test I study with them and we also write these tasks together to help each other out [Laughing] and also I consult with my lecturers and tutors about something that I do not understand and also to better understand the content that was learnt in class I utilize YouTube because sometimes studying theory or literature adds on to the anxiety that I have so, YouTube videos helps me because they summarize things for me.”

Similarly participant 6 pointed out that:

“When we were at home and not allowed to come back to campus when covid-19 was at its peak I would study every day and I am still doing do because the kind of degree that I am doing has a huge amount of workload, also I utilize study groups where we share information with each other and ask for previous question papers to ensure that I do not leave out anything when studying. Luckily then practical’s were cancelled but now since I am back on campus I am always on campus and for practical’s I am always in the lab and ask my demonstrator for assistance but mostly putting extra study hours and utilizing study groups help me with coping with online learning.”

Participant 7 further highlighted that:

“Studying hard and asking questions from your lecturers and tutors when you do not understand something is what helps me cope with online learning and also being part of different study groups for different modules also helps me because knowing that there are people who are struggling just as me with online learning and we all want to finish our degree that helps because we offer support and share knowledge and information with each other.”

Lastly Participant 8 highlighted that:

“To cope with the amount of workload that comes with online learning firstly cross nighting or rather putting extra study hours and studying with group of friends who are doing the same degree as mine helps me additionally asking for previous question papers from students who are a level ahead of me and also asking them questions when I do not understand something I found that really helpful, lastly I utilize the support that is given to us by lecturers such as consulting so the workload pressure is eased a bit. Oh, I almost forgot [giggling] also planning ahead makes me focus and I do not procrastinate.”

The research findings highlighted the important of students putting in extra work in addition to the support that the university offers them because the main aim is to ensure that effective learning is occurring even in the context of online learning and this can be achieved when there is a collaboration between the students, lecturers, and the university.

4.9. Chapter summary

This chapter discussed the findings of the research study and the themes that arose. The chapter highlighted the transition experience of students to university environment and the challenges that they encountered. This chapter further discussed the students' experiences of online learning by discussing the challenges and the benefits of online learning that the students experienced as a result of online and the study further discussed the forms of support that were offered to students and also the strategies this students use to cope with the pressures of the online learning.

CHAPTER FIVE

5. DISCUSSION

5.1. Introduction

This chapter will focus on a methodical synthesis of the body of literature, the theoretical framework, and the research results. This chapter will revisit various authors' concepts and claims on online learning. The focus of this discussion will also be on the research results and how they relate to the rest of the body of knowledge as well as other fields of study. The existing body of knowledge will be thoroughly examined, compared, and contrasted with the five themes. However, it will be desirable to adopt fresh viewpoints and offer alternative interpretations for the results.

5.1.1. Learning Context in the University of KwaZulu-Natal

According to Debag and Kitsantas (2012) argue that by incorporating collaborative and interactive learning strategies, online learning environments should be created to encourage and hone students' reflective and critical thinking abilities thus, Most South African universities now use learning management systems to meet the demands for more flexible and accessible online content distribution (Mpungose, 2019b). The University of KwaZulu-Natal in South Africa adopted the Moodle LMS in 2010 to help with the transition from a paper-based (face-to-face) environment to a paperless (online) one. It was made mandatory for first-year students in 2016 and fully implemented at the fourth-year level in 2019. (University Moodle Training Guide, 2017). A lack of a guiding online learning policy and inadequate training for lecturers sparked issues that were visible in the way that students used learning management systems (Mpungose, 2019b). The findings are the evidence of this lack of training as they indicate that students note that they have difficulties accessing Moodle because they lacked knowledge about how it works.

Furthermore, Van de Heyde and Siebrits, (2019) argue that as South African universities continue to embrace the utilization of online resources this, therefore requires the urgent need to support students' e-learning process. Moreover, Van de Heyde and Siebrits (2019) continue to argue that while universities heavily rely on online resources like learning management systems for online lectures, the customization done to them in order to fit a particular locale may actually make learning more difficult. It is clear from the testimonies of students who used Moodle for e-learning that few students had access to the Moodle learning management

system to download readings, presentations, and other materials throughout the switch from face-to-face to online instruction (at home).

This shows that instead of offering asynchronous online lessons, Moodle was customized as a depository. In other words, Anderson (2016) argues that the Moodle learning management system's integration with other web tools for chatting video conferencing (Zoom), recording (Cam Studio), and other uses was poorly done. However, the results support the widespread belief that social media platforms and other online applications must be added to the Moodle learning management system in order to provide online lectures. This means that colleges should start thinking creatively and use social media as a formal platform to complement learning management systems and provide instructors online. In addition, the current study indicates that students have challenges utilizing learning systems such as Moodle during the pandemic because they have no knowledge on how to use it and they preferred WhatsApp as their source of teaching and learning because they are much familiar with it.

However, Cesco et al., (2021) asserts that some academic staff members are still using remote learning tools like LMSs and video conferencing software to teach their courses a year and a half after the COVID-19 outbreak. Moreover, Sabli et al., (2020) argue that the academic staff learned about online tools that enabled asynchronous learning using text and/or recorded video throughout the epidemic. Additionally, a lot of them planned live interactive sessions with their students. Concurrently, Aguilar (2020) argue that academic staff use video conferencing tools frequently, including Big Blue Button, Zoom, D2L, Webex, Adobe Connect, Skype for Business, Microsoft Teams, and Google Meet, among others. They are utilizing these remote technologies to communicate with their students in a two-way fashion as a result of COVID-19.

According to Gregory and Salmon (2013) there is substantial debate about what this means for pedagogy as institutions shift more and more toward entirely online and blended learning environments. However, Orlando and Attard (2015) argue that many of the methods used for face-to-face communication can be adapted and employed in an online setting, there is not a "one size fits all" solution, Technology-wise. Furthermore, Orlando and Attard (2015) argue that teaching with technology is not a one size fits all strategy since it depends on the sorts of technology in use at the moment as well as the curriculum content being taught. Therefore, this indicates that the addition of technology adds new variables to consider when developing

instructional strategies and learning experiences. Although this is true, Kirkwood and Price (2014) assert that it is frequently assumed that technology may 'improve learning.

5.1.2. Students experiences of online learning.

According to Khothima (2020), successful online learning is the outcome of solid collaboration between pedagogy, technology, and organizational support. Students must learn from the third aspect and be engaged in exploring the experiences that online learning offers in order to have a successful online learning experience. Khothima (2020) further argue that to help achieve goals, pedagogy, or the pedagogy approach, must be considered in the online learning system. However, a mismatch between the online learning design and the methodology utilized must be avoided. Traditional lecture formats are frequently transferred directly into online-based training without any modifications to include activities and assignments. However, Hermanto & Srimulyani, (2021) argue that the effectiveness of online learning systems is heavily reliant on a number of interconnected components involving students, academics, learning resources, and existing technology. Moreover, the study findings indicate that there is a disjuncture between the pedagogy, technology, and support. As some students have no positive experience of online learning mainly because there is no co-ordination between pedagogy, technology and support from the institution as argued by Khothima (2020).

Hermanto & Srimulyani (2021) further argue that students that participate in asynchronous online learning have a far more engaged learning experience, however they need to have self-regulated learning and learn in a student-centred manner. Moreover Khothima (2020) argue that Project-based learning, assignments, independent experiments, discovery learning, and flexible learning are all learning methods that can be used in asynchronous learning. In Additional, Purwanto et al., (2020) asserts that students also state that because of the state of the internet infrastructure in the developing country, going online is costly. As a result of the asynchronous pattern, students constantly complain about running out of internet data despite their desire to attend lectures. Furthermore, Purwanto et al., 2020, did a study in which some students discussed their experiences with poor internet connections in their area. Therefore, the study findings concur with the literature as they indicate that students complain about network issues and highlighted that network challenge is the main barrier for them to experience online learning effectively and positively. As a result, it's critical to double-check students' online learning resources, such as their smartphone, computer, internet connection,

and electricity. However, according to a survey conducted by Familiarish (2020), students' favourite online program, WhatsApp group, is students' favourite because this application uses less internet data than others.

Even though students agree that online learning is an effective solution in this pandemic situation, according to the results of an interview conducted by Rahman et al. (2020), students feel pressured and are unable to cope and effectively complete their tasks because their lecturers assign so many tasks, forcing them to study remotely. Therefore this huge workload given to students and some of the modules not properly fitting into online learning symbolizes the disconnection or mismatch between online learning and the approach used of which institutions should avoid at all costs for the quality of education provided to their institutions and the quality of graduates the institutions provides, as research findings points out that because of the approach used to online learning students do not really fully understand the contents of the module as they are free to copy without their lecturers noticing and as a result they graduate without successfully meeting the module objectives.

In a study conducted by Rahman et al., (2020) Some students also shared that they are bored by online learning activities due to a lack of challenges. Butler (2012) argue that this issue of boredom arises as a result of the fact that online learning materials are delivered in a fixed amount of time. Therefore, not all materials can be taught and explained via online education. Nonetheless, Rahman et al., (2020) argue that some students acknowledged that online learning has enhanced their reading and writing skills, because their assignments consist of reading articles and discussing them in writing. They sometimes only listen to audios and movies provided by their lecturer for listening. They only practice speaking abilities when it's time to give a presentation using audio or video.

Moreover, some students argue that online learning should be promoted, according to a study done by Famularsih (2020) students believe that online learning is simple and useful. They further state that online learning is more convenient because they simply type the assignment and submit it as a soft file. Other students, on the other hand, emphasize the importance of combining online and traditional learning. Face-to-face learning also allows students to communicate directly with their instructors, according to the students. They can ask anything they do not understand and get an immediate response. Because it is critical for students to receive feedback or a reaction from their lecturer. However, students agree that in this epidemic circumstance, online learning is the best option.

5.1.3. Challenges of online learning experienced by students

The rapid transition from in-person learning to online instruction, as highlighted by the students, presented a number of difficulties for them. The responses from the students revealed that they faced the following difficulties. Students initially struggled with adjusting to online learning. Technical challenges, such as a lack of IT expertise, may be the cause of their difficulties. Second, it was difficult for students to get good access to the Internet for a variety of reasons, including the price of installing a fiber network, which is out of reach for certain students. The students acknowledged that they had trouble organizing their studies and managing their time so that they could submit in their assignments. Additionally, some of the children have said that they view the absence of interaction as a challenge for them, which has an impact on their development and personalities.

most the students have inexperience to online learning this causes them to experience lots of challenges with online learning, because online learning requires these students to abruptly shift and adapt to the unknown concept and maladaptation to online learning may expose inexperienced students to a variety of threats (Molnar et al., 2019). This have been supported by the research findings as many of the challenges experienced by students were reported by the research participants. These challenges vary from loss of human interaction, lack of technological devices and network issues. Lack of self-motivation and time constraints lowered academic performance.

5.1.4. Lack of technological devices and technical issues

According to the literature by Kruse (2006) argue that not everyone will have access to online learning because of network issues. Furthermore, Lee (2020) concurs with Kruse (2006) when he argues that students resort to climbing trees looking for better connectivity. In addition, based on the current study network issues have been identified by students as the main barrier to adjusting to online learning. Moreover, According to Greener (2008), a concern associated with online learning is increased workload. Technical issues, such as a lack of understanding of how technology is used or operated, or a lack of technology skills, can lead to confusion and an increase in burden. In agreement with Greener (2008) ,Beaunoyer et al. (2020) argue that online learning is costly, technological devices such as laptops and good internet connection are required to successfully adapt and be effective in

online learning. However, research findings concurs with the Beaunoyer et al., (2020) as they indicate that most of students do not have access to technological devices and those who have an access to learning devices struggle with technical side of online learning as students note that having no knowledge of how to use technology hinders their performance, as they struggle with submitting their assignments and checking their Moodle page and outlook for posted content. In addition to this, the research findings also indicate that because online learning requires students to learn from home and they were not invited back to campus they struggle with network because network connectivity in their respective areas is slow these findings concurs with Namahn (2002) as he argue that bandwidth limits may cause poorer performance of sound, video, and intensive graphics, resulting in longer download times for learning material, which can obstruct the learning process. The study also found out that due to network issues students end up missing classes and tests and this hinders the online learning process and experience.

However, the essential focus of the participants' opinions is that they lack the necessary network access and are therefore unprepared to participate in online learning. This suggests that while the concept of using online learning to make up for the loss of face-to-face contact is admirable, it excludes some students. To this end, World Bank (2020) notes that students who are already proficient and knowledgeable about using technology tools to support their learning, online sources in particular, who have sufficient access to good bandwidth and connected devices, and who are supported by their family and peers, will be able to make the best use of online learning. In addition to technical issues the study found that students complain about zoom limitations as it is well known that Zoom platform is the commonly used method of teaching and learning, However zoom has its limitations with regards to the number of people to attend the sessions and this is a challenge because lots of students end up not being able to attend due to the large number of students and they have to rely on the recorded sessions which becomes a challenge because some students encounter difficulty grasping information on the recorded sessions and this hinders the positive experience of online learning.

Not only do students struggle with technical issues such as network connectivity issues. In addition to technical issues the study found that data cost is also an issue for many of the students as some of them do not live on campus residences and because of covid-19 they are required to learn from home this means that in order to access internet they have to go to internet cafes or buy their own data and the data is costly. As a result of the lockdown

regulations, the majority of rural learners relied on internet cafés for their online needs, which made it harder for them to access online learning. This was discovered during the research. It is obvious that lockdown, used as a method to combat COVID-19, worsened the situation for rural students. Thus, promoting online learning as a method of thwarting COVID-19 is defeated by a lack of facilities or the closing of internet cafés. Therefore, it is crucial that the Department of Education establishes more locations where students can access online content for free or at a minimal cost in order to guarantee that the majority of students have access to the educational materials.

The explanation above makes it abundantly evident that the data problem is a significant barrier to online learning, and it is crucial that the cost of data be lowered to serve underprivileged areas. Alternatively, if the Department of higher Education is concerned that students would misuse the data for non-academic purposes, it should provide free access to learning resources to help students or data that is specifically designed for educational purposes.

The issue of technological devices and technical issues is problematic because it slows the process of online learning. As a result students do not have a positive experience of online learning more especially, if one do not have access to technological devices such as laptops the study has noted some students do not laptops more especially first year students and they have to rely on computers that are found on campus and the computer LANS are always full and they have limited time to use it because of covid-19 so this proves that without learning device the process of learning is disturbed. According to Kruse (2004) the cost of online learning is higher than that of other options. Although prices are constantly lowering, not everyone has access to technology equipment, and not everyone can afford to participate in online learning

It is obvious that the COVID-19 structure excludes many students from underprivileged communities despite being fair. As a result, according to Beaunoyer et al. (2020) it is unfair to set up educational systems and institutions that exclude some people on the basis of their poverty or because they reside in underprivileged communities. Additionally, the lack of connectedness hinders not only academic pursuits but also the tactics used in many contexts to combat COVID-19. World Bank (2020) further argue that the shift to online learning at scale typically benefits students already advantaged in many ways significantly, states that the lack of connectivity affects online education and prevents access to information, which is

crucial in the fight against COVID-19 (e.g., rich over poor, urban over rural, high-performing over low-performing, students in highly educated families over students in less well-educated families).

.5.1.5. Loss of human interaction

Purwanto et al., (2020) argue that students, are likely to become frustrated as a result of asynchronous pattern since they feel isolated when studying. Their social connection demands are becoming increasingly important. Furthermore, Synchronous learning make students feel more connected to and in control of their learning, as well as less isolated. Hence, students prefer it over asynchronous learning. The current study agrees with the argument by Purwanto et al., (2020) as the study indicate that student note that online learning pose a challenge to them as they feel isolated, and they have lost the essence of what university feels like. Therefore, as much as constructivism theory asserts that students are at the centre of learning, and they learn actively when they combine their past experiences and knowledge with the current knowledge then this argument leaves the most important question. Are students effectively learning? are they really constructing new knowledge? the research indicates otherwise students do not really learn they are just passive recipients of knowledge in online learning and students do not have a chance to interact with their environment, because it has been noted that online learning confine students and put them in isolation.

In Addition, Khan et al., (2021) argue that computers cannot replace human interaction, and over-reliance on them decreases social engagement, and the study indicates that online learning reduces social engagement, as online learning deprives students with the chance to experience university life by attending classes and having face-to face interactions with their peers and lecturers. Online learning requires an abrupt change from attending classes face to face to attending classes online via platforms such as zoom. This change has resulted to students not knowing their peers personally and they do not get a feel of what lecture sessions actually feel like. Purwanto et al., (2020) further argue that isolation in online learning can be overcome by communicating in real time and on a continuous basis. As a result, students will become aware of themselves as members of the learning community rather than as isolated individuals interacting with computers.

The synchronous pattern allows for the monitoring of student responses to a message, making recipients feel more committed and motivated to learn. However, Khothimah's (2020) study

finds that many students perceive synchronous communication to be "more like talking" than asynchronous communication. It appears that exchanging social support and discussing less "complicated" topics is more acceptable. Because this sort of communication is more like face-to-face conversation, students are more stimulated and psychologically driven. This was affirmed by the study as students preferred contact learning over online learning as students feel that they are more stimulated and learn better in contact learning. In addition, many students believe that online learning is impersonal and cold, and that the important component of direct class content discussion between students and lecturers has been lost. Consequently, Barrot (2021) argue that Mobility and face-to-face contacts were impacted by COVID-19. For instance, the study indicated that students states that their learning and interpersonal abilities suffered from the lack of face-to-face interaction with their classmates, while others said that mobility limits hindered their ability to learn.

The findings also indicate that students cannot even form study groups as most of the time students attend from home and the way they communicate and engage with each other is through social media platforms such as WhatsApp and this proves that in online learning human interaction is lost and the daily routine of a university student changed from attending classes on campus to waking up and seating behind laptop and doing schoolwork. Additionally, Carolan et al., (2020) argue that isolation is a significant issue in the course design. Furthermore Carolan et al., (2020) further highlights the need to strike the ideal balance between individualized, student-centred learning and collaborative learning. Virtual communities of practice should be fostered to improve peer engagement and collaboration among students.

5.1.6. Lack of motivation and time constraints

Halupa (2016) argued that some drawbacks of online learning include lack of student discipline, lack of motivation, lack of student discipline, exhaustion, and boredom. Due to lots of distractions that comes with their environments may lead to them procrastinating. Furthermore, Halupa (2016) further argue that the lack of motivation and time constraints have been found as one of the challenges associated with online learning. The reason for the lack of motivation as found by the study is that due to the environment of online learning students are required to study at their own time and pace, this flexibility is associated with lack of motivation as students have reported that often procrastinate their work because they have plenty of time, Additionally, the findings agree with Liang et al., (2020) as he argue that

due to difficulties including boredom, a feeling of isolation, a lack of time to follow the various subjects, and a lack of self-organizing skills, students also found it challenging to keep attention in an entirely online context. Concurrently, Hermanto et al., (2020) argue that since most tasks are only available online, internet limitations, and dependence on technical equipment, It is very likely that students would become distracted when using the internet as a learning tool because there are so many different distractions available.

Furthermore, Halupa (2016) further argue that the existence of social media platforms has revealed to be a big problem for today's students due to the increasing degrees of addiction. In agreement to this, Hermanto et al., (2020) argue that the wide range of distractions in online learning makes it difficult for the students to focus on the information that the lecturers were delivering online. Moreover, the research findings concur with Halupa (2016) and Hermanto et al., (2020) as they indicate that students experience a variety of distractions while trying to study online which often results in students being demotivated with their studies. Additionally, Duraku and Hoxha (2020) argue that the student's inability to concentrate on the information provided through the platform would cause an increase in stress levels among the students because they would not have understood the content delivered during the lecture and would therefore not be able to complete their assignments in accordance with the lecturer's requirements.

Changes in student life have impacted attention issues, motivation issues, and difficulties with online learning, which have all led to anxiety symptoms and perceived psychological stress (Duraku & Hoxha, 2020). Some students are not privileged to have a conducive learning environment it should be taken into consideration that some students come from poor backgrounds and in their homes, they encounter challenges or disruptions as they are expected to do all the house chores and when they get time to study, they are already tired and demotivated and this results to procrastination and this affects their learning process. Therefore, online learning is not for everyone because of its challenges and when it was brought to students, they are not ready for it

5.1.7. Impact of online learning on academic performance

Boardman et al. (2021) argue that online courses primarily rely on student motivation, and even when students are left alone, they must be able to do their projects on time. However, Upton (2006) argues that since the lecturer plays the function of the motivator in face-to-face classes, a student's lack of desire may prevent them from learning the subject, either

completely or at all. Moreover, Diep et al., (2019) argue that student performance and motivation both in and outside of the classroom will be influenced by feeling connected to other students and to one's teachers. Thus, the current study indicate that online learning has impacted students' academic performance either positively or negatively. Students experience online learning differently. Furthermore, the way students adjust to online learning differ as a result their academic performance will also differ.

Additionally the study also finds that due to the pressure of trying not to disrupt academic classes this has led to the lecturers bombarding students with a lot of work in a very limited time, so students who come from impoverished backgrounds they will not cope with the huge workload given to them as they are already battling with the challenges that they face due to online learning and their inexperience of how to use technology and technology devices such as laptops and this will results to lowered academic performance, It does not help that these students do not get proper support from the institution and from their parents because the form of support offered by the institution is through online then this begs the question how do these students then gain access to these kinds of support the institution whereas they cannot even access the internet for their own academic purposes so all these constraints contributes to the lowered academic performance of these students.

5.1.8. Advantages of online learning

According to Broadbent (2002) Students' perceptions of higher education have altered because of the rising use of online learning in higher education institution, but other advantages include flexibility, accessibility, active autonomous learning, responsibility, confidence building, and interactivity. In agreement with Broadbent (2002), Anderson and Elloumi, (2003) argue that students can complete online courses while working in their own area, allowing them to contextualize their learning. The current study concurs with the literature as the student viewpoints indicate that, asynchronously recorded online learning classes ensure that students will have access to the learning materials based on their convenient schedule. Additionally, since the emphasis of instruction has shifted to emphasize student learning, online learning encourages students to participate in the learning process (self-paced learning). Moreover, Churton (2008) argues that online learning provides for a more "student-centred" teaching method because learning occurs asynchronously, allowing students to avoid the constraints of traditional classroom practice, which requires everyone to learn the same topic at the same time. Concurrently, Kruse (2006) argue that one of the key

advantages of online learning is active learning. Students are not passive consumers of knowledge, receiving it from academics who just pour it on them rather, students generate knowledge through experience and socialization. Therefore, according to the current study students state that online learning enables them to gain new knowledge and abilities. Additionally, it decreased the price of travel to universities and associated costs. Utilization of travel-related resources and other fees.

Additionally, according to the current study flexibility has been noted as one of the advantages associated with online learning. as it is noted that since online learning require students to work at the comfort of their own home at their own pace and time, in an interconnected world where more and more things are possible. Moreover, the study indicates that Online learning has several benefits, including flexibility and cost savings since students can complete their coursework without having to go to a campus or search for accommodations that are close to a campus and suitable for learning. Additionally, because the lecturers provide the students with all the necessary learning materials for that course, it eliminates the need for expensive textbooks, which makes online learning an excellent choice for struggling financially students and significantly increases their chances of success in life. Thus, Online education is spreading and growing popularity. the cause of this is that there are numerous reasons a student may not be able to attend a physical class owing to some conflicting responsibilities, such as family emergency or medical reasons, However, this flexibility does not negate logistical issues like distance and mobility, but it also creates a chance for students to study whatever they want regardless of where the course is offered, so online learning offers students that flexibility since it does not require them to attend physical classes as they only attend at their own time and pace, which is a convenience to students. Additionally, because they can access their recorded sessions at any time of the day and take as much time as necessary to review and study ideas, they are having trouble with online learning gives students the chance to study at their own speed and time. As most online learning is self-paced, students can plan their own work and study time without worrying about missing classes.

5.1.9. Forms of support offered

According to Khothima (2020) that for effective online learning there must be coordination between the pedagogy, institution, academics, and students. Therefore, for students to successfully adjust to online learning they require all the assistance and support they can get

from the institution. Based on previous studies it has been found that when students are offered support they easily cope and adjust to online learning. Thus, it has been noted that most students complain about technological issues as a barrier to their positive online learning experience. Furthermore, when the institutions provide students with orientation on how to utilize technological devices such laptops and how to use Zoom etc this ease the students anxiety of not knowing how to partake fully in online and students having fear of not performing well academically, Moreover, the current study indicate that that the institution is offering support to students in a form of data provision to close this digital divide that hinder those who do not afford partaking fully in online learning.

5.1.10. Coping strategies that students use to cope with online learning

According to Li F (2020), the pandemic has disrupted many aspects of daily life, with the education sector suffering some of the worst effects. Furthermore, Li F (2020) argue that students have experienced the closure of their schools, universities, or other relevant institutions. However, UNESCO (2020) assert that to minimize a generational divide, it is therefore vital to continue the educational process through remote or online learning on digital platforms. The implementation of this new educational delivery model seemed straightforward, and it has shown to be advantageous in a number of ways. However, the virus' evolution and the ensuing social isolation leads to serious mental health issues for many students. For instance, the rise in confirmed corona virus cases and deaths has a negative impact on students' mental health because this heart-breaking news produce feelings of anxiety, stress, and depression. Concurrently, Ribeiro et al. (2018), argue that students face more emotional demands that worsen their psychological health and cause a number of disorders. furthermore Ribeiro et al., (2018) argue that Stress, depression, anxiety, and suicide risk behaviours have been linked to increased risk, especially among university students. Despite reporting the highest levels of stress, students have received little attention. In addition, Yang et al., (2021) argue that to the customarily long study sessions and demanding curriculum workloads, university students face a number of difficulties. Financial strain, anxiety about the future of one's profession, spending a lot of time at home, and loneliness have all been recognized as significant stresses during the outbreak, Thus, the study indicate that students experienced stress due to this abrupt shift and the huge amount of workload that is given to them.

Additionally, Nusrat-E- Mozid (2022) argue that students in universities are not exempted from experiencing stress to some degree. Many students experience academic stress as a result of external, internal, or societal pressures that force them to alter their behaviour, but stress may not necessarily manifest negatively. Porcelli and Delgado (2017) argue that positive stress has been shown to enhance memory, risk-taking, and decision-making abilities). While there is not a flawless method for managing stress, utilizing practical strategies can aid when things get tough and improve students' academic, social, and emotional circumstances. These strategies can reduce the negative consequences of online learning, such as altered eating and sleeping cycles, being apart from classmates, and loneliness, when used in the context of the COVID-19 pandemic. Furthermore, Stanislavski (2019), argue that coping mechanisms is a collection of behavioural and cognitive strategies that can be examined as activities that are employed to respond to distressing circumstances, demands, and conditions therefore, this research study indicate that students employ an emotion and problem-focused approach to cope with the demands and challenges of online learning.

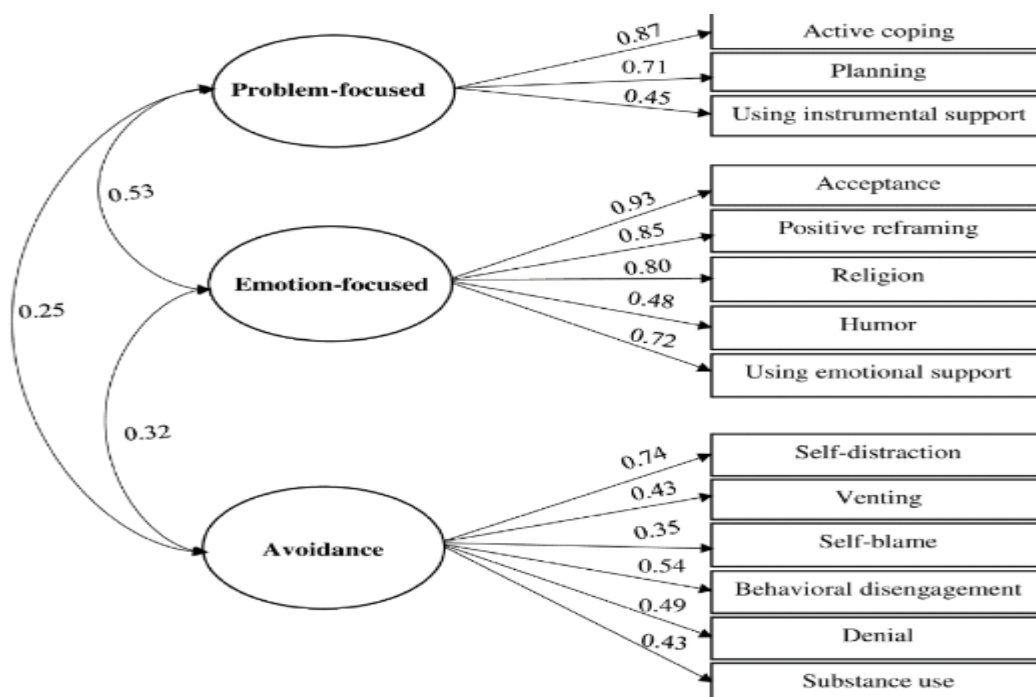


Figure 3:CFA model for brief-COPE inventory (Stanislavski, 2019)

The study also discovered that students use a more positive strategy to deal with the rigors of online learning and that they use a problem-focused strategy to reduce the stress brought on

by the corona virus. According to Karataş and Arpacı (2021) both a student's academic performance and personal life can be greatly impacted by stress. When forced to experiment with online learning during COVID-19, university students with disrupted daily routines struggle terribly.

Institutions can also play a crucial role by preparing future teachers to assist students in transitioning smoothly during difficulties like COVID-19. It is a known fact that online learning came with a lot of challenges to students, but the University of KwaZulu-Natal tried by all means to offer support to its students so that they can adjust to online learning. However, learning requires collaboration from the institution, academics, teaching approach used and also students' willingness to learn as argued by Khothima (2020). Moreover, it is also the student's responsibility to ensure effective learning as they are seen as active participants in learning.

Since students had no understanding about self-directed online instruction, students who were affected by this global pandemic experienced extreme mental stress. The findings of this study offer a number of recommendations for university stakeholders in terms of meaningful education. Students who employ various adaptive or non-adaptive tactics, like active behavioural coping, have had success. Moreover, it is highlighted in the study that in addition to the forms of support offered to students it also the students responsibility to ensure that their learning and studying is effective. However, for effective learning, collaboration between the institutions, teaching and learning approach and the students must be ensured each factor involved must play its role successfully and if there no smooth collaboration between these factors effective online learning in the context of online learning will not be ensured. Therefore, it is vital for students to employ certain strategies that will ensure that they successfully cope with online learning for effective learning to occur.

5.2. SUMMARY

This chapter discussed the findings of the research study and the themes that emerged. The chapter highlighted the transition experience of students from high school to the university environment. This chapter further discussed the students' experiences of online learning and the challenges and benefits of online that students experienced. Additionally, this chapter also highlighted and discussed the forms of support that is provided to students by the institution

that form part of the means that will assist student's to successfully adjust and adapt to online learning. Lastly this chapter discussed the coping strategies used by students to cope with online learning demands and challenges

CHAPTER SIX

6. conclusion, Recommendations and Limitations of the study

6.1. Introduction

The study set out to explore the perceptions and experiences of UKZN students with regards online learning as it was introduced to them in year 2020 as a form of emergency learning to avoid academic classes disruption due to the global pandemic of coronavirus. Moreover, this study tries to bridge a gap by developing an in depth understanding of UKZN students experiences and perceptions of online learning so that the university will know how its students various needs could be met instead of using a “one-size-fit all” approach to attend to students needs during a pandemic and this will also help the institution become prepared should there be another outbreak. The aim of this study was to gain a better understanding of how University of KwaZulu-Natal students perceived and experience online learning with objectives to do the following:

- To explore the experiences of university students of online learning at the university of KwaZulu-Natal.
- To understand the experience of the transition of students from traditional mode of teaching and learning (Contact learning) to online learning at the university of KwaZulu-Natal.
- To investigate the benefits and challenges of online learning experienced by university students.

It was therefore important that the structure of the research enquiry is informed by stringent strict discipline of a set of research questions which seek to find the following answers

- What are the experiences of university students of online learning?
- How is the experience of the transition from traditional method of teaching and learning to online learning?
- What are the challenges and benefits of online learning?

In a brief overview and discussion at the beginning of this study, it was mentioned that COVID-19 had changed people's lifestyles around the world, and that these security measures also applied to education. It was also mentioned that, by the year 2020, online learning had replaced traditional classroom instruction at KwaZulu-Natal University. Since then, a phased online approach has been developed for the first week of the semester. Higher education institutions around the world delayed the start of the academic year four times after the first case of COVID-19 was discovered in Wuhan, China. Institutions all over world decided to switch from face-to-face education to online learning for safety grounds (Wang et al., 2020). Therefore, it was important to understand different student experiences of online learning, Hence, the reason why I decided on this study because seemingly online learning will be now considered as the main form of teaching and learning considering that technology is constantly evolving. Therefore, the different student experiences cannot be ignored because they will directly tell the institution how to structure the Curriculum and teaching approaches that will meet the varied needs of their students to avoid the digital divide amongst students.

Based on the research findings I can then conclude that coordinated online learning can successfully encourage the right learning experiences while looking for meaningful online learning experiences as argued by Khothima (2020). In the current study Students were investigated and their learning experiences are major players in online learning. In order to give feedback, students must be participating in the learning process actively. This will improve their ability to learn online. Therefore, Students perceived and experienced online learning differently as some experienced online learning negatively as they had challenges adjusting and adapting to it as a result their academic performance was affected. However, it should also be noted that some students experienced online learning positively as they saw their academic performance improving compared to contact mode of learning.

Additionally, the current study investigated how the pandemic affected students' online learning experience as well as the difficulties they faced in an online learning environment. The results showed that students faced a variety of types and degrees of online learning problems. Their home learning setting presented the biggest problem, whereas technical literacy and competency posed the least amount of difficulty. According to the students' comments, the pandemic has also been found to make their issues worse, particularly in terms of learning experience quality, mental health, finances, interactions, and mobility.

To those who experienced and perceived online learning negatively was because of the challenges that were associated with online learning such as technological and internet issues and also them not understanding how online learning works as result this impacted how they experience and perceive online learning because these challenges were associated with feelings of isolations and anxiety. However, to those who experienced online learning positively it was because they found that online learning offered them flexibility as they were able to study at their own pace and time at the comfort of their own home. Travelling costs were reduced since they were studying from home, and this was found to increase their academic performance.

The current study also found that these challenges associated with online learning affect mostly students from underprivileged backgrounds as they are the ones who complained about experiencing most of the challenges associated with online learning , and their lack of technological knowledge also hindered the positive experience of online learning, as it created frustrations and anxiety of being left behind due to lack of understanding of how technological devices work and they could not ask for assistance since online learning urged that everyone work from their respective homes and these students had to fiddle by themselves till they understand how technology works and the study also found that the forms of support offered to these students by the institution were not enough as the orientation to mostly first year students were conducted online then this begs the question how do students who has a lack of technological knowledge, technological issues and lack of technological devices access such form of support that is offered online?. Consequently, this impacted the way students experience and perceive online learning.

While the majority of research found that technology use and proficiency were the most frequent issues students encountered while taking online classes the situation is a little bit different in underdeveloped nations during pandemics. Additionally, the findings have demonstrated, the learning environment poses the biggest obstacle for students to overcome, particularly home distractions (such as noise) and constraints on the learning environment and resources. According to the findings, there may be some differences between the regular difficulties students have in an online learning environment prior to the pandemic and those encountered during it.

One explanation for this outcome is that their limited mobility may have made the problem worse because they were unable to travel far from their homes to get to school or other

learning facilities. As evidenced by the data, implementing lockdowns limited students' learning opportunities (such as conducting laboratory experiments), restricted their interaction with peers and teachers, led to depression, stress, and anxiety among students, and depleted the financial resources of those who belong to lower-income groups. Each of them had a negative effect on how well students learned.

In conclusion the overall study findings show that each student faced different challenges and had different coping mechanisms. They should therefore be examined considering the interactions between numerous components. According to the students' comments, the resources at their disposal, their interactions with teachers and peers, and the institution's current regulations and norms for online learning all played a role in mediating their online learning issues and techniques. The pandemic, enforced lockdowns, and students' socioeconomic situation made the difficulties students faced much more difficult. Additionally, we can then conclude that the research questions were answered successfully, and the research aim was achieved.

Theoretical framework that was guiding this research assisted in understanding the varied students experiences to encourage effective learning. Therefore, understanding these varied experiences will in turn help the academics, the institution to know where and how to restructure their teaching approached to teaching and learning instead of using a “one-size-fit-all” approach. Lastly, the research objectives were met, and the research questions were answered in this study.

6.2. Recommendations of the study

6.2.1 University of KwaZulu-Natal

- This study emphasized the value of higher education institutions' preparedness for emergencies and emergency response capacity. National and institutional policies, procedure and guidelines, technological infrastructure and resources, instructional delivery, staff development, potential disparities, and collaboration among key stakeholders are just a few of the crucial areas that require the utmost attention (i.e., parents, students, teachers, school leaders, industry, government education agencies, and community).
- Institution should reconsider their one-size-fit-all approach to teaching and learning since no students learn the same way.

6.2.2 Future Research

- A variety of environmental factors may have influenced each student's unique coping mechanisms, including resources available, student personality, family structure, relationships with peers and teachers, and aptitude. Researchers could expand on this research by looking into the ways in which various circumstances affect people's adoption of methods.
- All additional players involved in the teaching-learning process could be included in future studies to increase the sample size. To gain a more comprehensive understanding of the issue and how numerous factors interact with one another or affect one another, researchers may go further by examining teachers' perspectives and experiences.
- Future research may potentially reveal certain teacher-related variables that may affect how well students learn online. Students' age, sex, and degree plans may be looked at in relation to the unique difficulties and coping mechanisms they encounter. Despite having a sizable sample size, only Howard College students from the University of KwaZulu-Natal were included in the study.
- The study may also involve collecting samples in certain areas to be explored in greater depth, such as the effect of online learning on students' academic performance. The effect of online learning systems on teachers' work satisfaction and performance in online learning could also be examined in later studies.
- Future research may broaden the learning context and include numerous higher education institutions from various geographic regions to strengthen the robustness of the findings. The pandemic has clearly changed the educational landscape and stretched it to its breaking point. The education system will become stronger because of this unprecedented event, allowing it to withstand attacks in the future.
- Online teaching and learning have just recently become the subject of research. Many fields of contemporary study contain significant unanswered questions, and there are many concerns and issues that have not yet been investigated. Although the technology will undoubtedly change in unpredictable ways, the fundamental concept of teaching and learning through a medium that isolates people in time and place may be unaffected by the precise makeup of the technology.
- One major area for research is developing a better understanding of the mechanisms through which students learn in online environments.

6.3. Study limitations

- One of the greatest limitation of this study was that there was a gap on literature, there was not much literature on the phenomenon explored as this was a new phenomenon.
- The fact that this study's exclusive focus was on students' experiences and perspectives led to a lack of data that could be acquired to help grasp the notion of online learning is one of its limitations.
- Another study limitations because the study was conducted online the limitation included challenges with participants recruitment which resulted to a lack of participants variety in terms of race.
- The research study has drawbacks, such as the generalization of research results, which means that since perceptions and experiences are a subject phenomenon, the research results cannot be generalized in the larger population. A longitudinal study can be used in future studies to overcome this constraint. Additionally, only one category of respondents—students—were used to get the data. As a result, it is impossible to generalize the study's findings to additional samples. To make the findings more universal, future study can also incorporate the opinions of educators and decision-makers.

6.4. Conclusion

Online learning research is still in its infancy in many aspects. Conceptions of online teaching are only slowly shifting away from a metaphor of "delivering education" toward a richer and more nuanced understanding of what online environments have to offer for teaching and learning, there is still more research to be done to better comprehend and devise what can be done to take advantage of the benefits that internet education and learning provide for anybody and everyone, at anytime, anywhere.

7. REFERENCES

- Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, 1-13. <https://doi.org/10.1080/10494820.2020.1813180>
- Allen, M. (2003). *The lessons of e-learning*. *Optimize*, 12: 51.
- Anderson, T. & Elloumi, F. (2003). *Theory and practice of online learning*. Athabasca University online.
- Aycock, A.; Garnham, C. & Kaleta, R. (2002). *Lesson learned from the hybrid course project: Teaching with Technology Today*, 8(6): 1-6.
- Bielawski, L. & Metcalf, D. (2003). *Blended e-learning, integrating knowledge, performance, support, and online learning*. Amherst, Massachusetts. HRD Press.
- Boardman, K. L., Vargas, S. A., Cotler, J. L., & Burshteyn, D. (2021). Effects of Emergency Online Learning during COVID-19 Pandemic on Student Performance and Connectedness. *Information Systems Education Journal*, 19(4), 23-36
- Boulos, M.N.K., Maramba, I. & Wheeler, S. (2006). Wikis, blogs and podcasts: a new generation of Web-based tools for virtual collaborative clinical practice and education. *BioMed Central Medical Education*, 6: 41.
- Blanche, M.T, Durrheim, K., & Painter, D. (2006). *Research in practice: Applied methods for the social sciences*. 2nd edition. Cape Town: Cape Town University Press
- Braun, V., & Clark, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3.
- Broadbent, B. (2002). *ABCs of e-learning reaping the benefits and avoidance the pitfall*. Jossey-Bss/ Pfeitter, San Francisco, CA.
- Brown, R. (2003). *Blending learning: Rich experiences from a rich picture*. *Training Development in Australia*, 30(3):14-17.
- Carnevale, (2006). *Professors seek compensation for online courses*. *Chronicle of Higher Education*, 50(49).

- Chieu, V. M. (2007). An operational approach for building learning environments supporting cognitive flexibility. *JOURNAL OF EDUCATIONAL TECHNOLOGY AND SOCIETY*, 10(3), 32.
- Choid, K.V. & Groeneboer, C. (2004). *An Integrated Cost for Blended Learning Environment*. In: Cantoni, L and McLoughlin, C. 2004 eds: World Conference on Educational Multimedia, Hypermedia & Telecommunications. Norfolk: AACE, pp 1012- 1019.
- Churton, M.W. (2008). *Pedagogical considerations for online (e-learning) teaching-learning*. SEAMEO ICT Conference.
- Deller, K. (2010). *The human element is critical to online learning success*. People Dynamics, 1: 25.
- Demirbilek, M. (2014). The ‘digital natives’ debate: An investigation of the digital propensities of university students. *Eurasia Journal of Mathematics, Science and Technology Education*, 10(2), 115-123. <https://doi.org/10.12973/eurasia.2014.1021a>
- Deng, L., & Yuen, H. K. (2009). *Designing blended learning communities: Principles and implementation*, In F. L. Wang, J. Fong, & R. C. Kwan (Eds.), *Handbook of research on hybrid learning models: Advanced tools, technologies, and application* (pp. 228-243). Hershey, PA: IGI Global Publications
- Department of Education (DOE). (2004). Draft white paper on e-Education. *Transforming learning and teaching through Information and Communication Technology (ICTs)*. Government Gazette No 26734. Pretoria.
- Department of Education (DOE). (2001). *The National Plan for Higher Education Online*. <http://www.polity.org.za/html/govdocs/misc/higheredu>.
- Finn, A. & Bucci, M. (2004). *A case study approach to blended learning*. <http://www.centra.com/download/whitepapers/CaseStudyBlendeLearning.pdf>.
- Garrison, D.R., & Vaughan, N.D. (2008). *Blended learning in higher education: Framework, principles, and guidelines*. San Francisco: Jossey-Bass.
- Graham, P. (2005). Web 2.0. <http://www.paulgraham.com/web20.html>.

- Graham, J.M., Mogel, L., Brallier, S.A. & Palm, L.J. (2007). *Do you online? The advantages and disadvantages of online education*. Journal of Online Learning and Teaching, 4: 133- 141.
- Greener, S. C. (2008). *Self-ware and self-directed: student conceptions of blended learning*. MERLOT. Journal of Online Learning and Teaching, 4: 243-253.
- Hiltz, S.R. & Goldman, R. (2005). *Learning together online: Research on asynchronous learning networks*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Hinrichs PL. COVID-19 and Education: A Survey of the Research. Econ Comment (Federal Reserv Bank Cleveland). 2021; 1–6.
- Hrastinski, S. (2008). *A study of asynchronous and synchronous e-learning discovered that each support a different purpose*. Educause Quarterly, 4.
- Janghorban, R., Roudsari, R.L., & Taghipour, A. (2004). *Skype interviewing: The new generation of online synchronous interview in qualitative research*, journal of qualitative studies on health and well-being, 9:1,24152
- Kruse, K. (2004). *What are Synchronous and Asynchronous Training?* <http://www.e-learningguru.com/article/art1-7.htm>.
- Kruse, K. (2006). *The benefits and drawbacks of e-learning*. <http://www.e-learningguru.com/article/art1-3.htm>.
- Lindsay, E.B. (2004). *The best of both the worlds: teaching a hybrid course*. Academic Exchange Quarterly, 8(3): 317-321.
- Louw, J.A. & Hanmer, L. (2002). *Implication of the information revolution for economic development in South Africa*. Department of trade and industry policy support programme management unit. New Mucleneuck, Pretoria, South Africa
- Longhurst, R. (2003). *Semi-structured interviews and focus groups: key methods in geography* 3(2),143-156.
- Merriam, S.B. (2002). *Qualitative research in practice: Examples for discussion and analysis*, 1(1),1-17.
- Murphy, K. L., & Cifuentes, L. (2001). Using Web tools, collaborating, and learning online. *Distance Education*, 22(2), 285-305.

- Mouton, J. (2001). *How to succeed in your master's and doctoral studies*. A South African guide and resources book. Paarl: Van Schaik.
- Namahn, M.N. (2002). *E-learning: a research note*. Retrieved on 24 April 2021 from <http://www.namahn.com/resources/documents/note-e-learning.pdf>.
- Neuman, W.L. (2013). *Social research methods: Qualitative and quantitative approaches*. (7th edition).
- Neuman, W. (2014). *Social research methods: Qualitative and quantitative approaches* (Seventh edition. Pearson new international al ed.). Pearson.
- O' Neil, C., Fisher, C. & Newbold, S. (2009). *Developing online learning environments in nursing education*. New York: Springer Publishing Company.
- O'Reilly, T. (2006). *Web 2.0 Compact Definition: Trying Again*. Retrieved on 24 April 2021 from <http://radar.oreilly.com/archives/2006/12/web-20-compact.html>.
- Palloff, R. & Pratt, K. (1999). *The virtual student: A profile and guide to working with online learners*. San Francisco: Jossey-Bass.
- Patton, M.Q. (2002). *Qualitative research and evaluation methods*. (3rd edition). Thousand Oaks, California: Sage Publications.
- Purwanto, A., Pramono, R., Asbari, M., Hyun, C., Wijayanti, L., & Putri, R. (2020). Studi Eksploratif Dampak Pandemi COVID-19 Terhadap Proses Pembelajaran Online di Sekolah Dasar. *EduPsyCouns: Journal of Education, Psychology and Counseling*, 2(1), 1–12. <https://ummaspul.e-journal.id/Edupsyscouns/article/view/397>.
- Rahman, M. S. (2017). *The advantages and Disadvantages of Using Qualitative and Quantitative Approaches and Methods in Language "Testing and Assessment" Research: A Literature Review*. *Journal of Education and Learning*; Vol.6, No. 1;2017.
- Rehman, R., & Fatima, S.S. (2021) *An innovation in flipped classroom: A teaching model to facilitate synchronous and asynchronous learning during a pandemic*. *Pakistani journal of medical sciences*. 37 (1), 131-136.

- Ribeiro ÍJS, Pereira R, Freire IV, de Oliveira BG, Casotti CA, Boery EN. (2018) Stress and Quality of Life Among University Students: A Systematic Literature Review. *Heal Prof Educ*: 70–77. <https://doi.org/10.1016/j.hpe.2017.03.002>
- Roberts, T.G. & Dyer, J.E. (2005). *The influence of learning styles on student attitudes and achievements when an illustrated web lecture is used in an online learning environment*. *Journal of Agricultural Education*, 46 (2): 1-11.
- Roudriguez, M.C., Rooms, A. & Montanez, M. (2008). *Student`s perceptions of online learning quality given comfort, motivation, satisfaction, and experience*. *Journal of interactive online learning*, 7(5): 105-125.
- Shaheeda, J., Ngambu, D. & Czerniewicz, L. (2006). *The role of ICTs in higher education in South Africa: one strategy for addressing teaching and learning challenges*. *International Journal of Education and Development using ICT*, 3(4).
- Sloman, M. (2004). *The e-learning revolution from proposition to action*. London: CIPD.
- Stanisławski K. (2019) The Coping Circumplex Model: An Integrative Model of the Structure of Coping with Stress. *Front Psychology*.
- Swan, K. (2005). A constructivist model for thinking about learning online. In J. Bourne & J.C. Moore (eds). *Elements of quality online education: Engaging communities*. Needham, MA: Sloan-C
- Takalani, T. (2008). *Barriers to e-learning amongst postgraduate black students in higher education in South Africa*. Unpublished master's dissertation. Stellenbosch University. South Africa.
- Tang F, Byrne M, Qin P. (2018). Psychological distress and risk for suicidal behavior among university students in contemporary China. *J Affect Disord*. 2018;228: 101–108. pmid:29245090
- Trilling, B. & Hood, P. (1999). *Learning, technology and education reform in the knowledge age or we are wired, webbed and windowed, now what?" Educational Technology*, 39(3): 5- 18.
- Ulin, P. R., Robinson, E. T., Tolley, E., & McNeill, E. T. (2002). *Qualitative methods: a field*

guide for applied research in sexual and reproductive health. USA. Family Health International.

UNESCO. (2021) Education: From disruption to recovery. UNESCO Institute for Statistics data. <https://en.unesco.org/covid19/educationresponse/>

Wagner, A.D. (2001). *IT and education for the poorest of the poor: constraints, possibilities, and principles*. TechKnowLogia, July/August: 48-50.

Wesley, D. (2002). *A critical analysis on the evolution of e-learning*. International Journal on E-Learning, 10.

Yang C, Chen A, Chen Y. (2021). College students' stress and health in the COVID-19 pandemic: The role of academic workload, separation from school, and fears of contagion. PLoS One.

Yaseen, H., Alsoud, A., Nofal, M., Abdeljaber, O. & Al-Adwan, A. (2021). The Effects of Online Learning on Students' Performance: A Comparison Between UK and Jordanian Universities. *International Journal of Emerging Technologies in Learning (iJET)*, 16(20), 4-18. Kassel, Germany: International Journal of Emerging Technology in Learning. Retrieved September 14, 2022, from <https://www.learntechlib.org/p/220541/>.

Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). Suspending Classes Without Stopping Learning: China's Education Emergency Management Policy in the COVID-19 Outbreak. *Journal of Risk and Financial Management*, 13(3). <https://doi.org/10.3390/jrfm13030055>

Zhu, X., & Liu, J. (2020). Education in and After Covid-19: Immediate Responses and Long-Term Visions. *Postdigital Science and Education*, 2(3), 695–699. <https://doi.org/10.1007/s42438-020-00126-3>.

8. Appendices

8.1. Appendix A: Informed consent form

Dear Student:

My name is **Thulile Xulu**, and I am conducting a research study as part of my Master of social science in Psychology degree. The research study is aimed at getting a better understanding of how university of KwaZulu-Natal students perceive and experience online learning. Ethical clearance to conduct this study will be requested from the University of Kwazulu-Natal ethics committee.

The duration of each semi- structured interview will be approximately 30-45 minute and it will be guided by the interview schedule. With your informed permission the interview will be audio recorded. Participation in this study is completely voluntary therefore, should you agree to participate you will be allowed to withdraw from the study at any given time. The refusal to participate in the study or withdrawal will involve no penalty whatsoever. I assure you that all information you provide will be kept confidential and that your participation will remain anonymous. All collected data will be stored in a safe place for a period of five years after which it will be destroyed.

If you have any further information, please do not hesitate to contact me or my research supervisor Dr Mthokozisi Hlengwa. Additionally, you can also contact the research ethics committee (HSSREC)

Contact Details

Thulile Xulu

Tel: 081 093 2257

Email: 217000597@stu.ukzn.ac.za

Mr Mthokozisi Hlengwa

Supervisor

Email: hlengwam1@ukzn.ac.za

ETHICS COMMITTEE (HSSREC)

Tel: 031 260 4557/8350/3587

Email: HSSREC@ukzn.ac.za

Regards

Thulile Xulu

INFORMED CONSENT

I (full names) consent that I have been informed about the study titled “exploration of students perceptions and experiences of online learning at the university of KwaZulu-Natal (Howard college campus)” that will be conducted by Miss Thulile Xulu.

Consent

By participating in this research, I agree with and have read this consent form in its entirety.

I have read, and I understand the provided information and have had the opportunity to ask questions and I have been answered with clarity. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost.

I understand that I will be given a copy of this informed consent form, therefore I voluntarily agree to take part in this research study.

I hereby provide addition consent to: Audio- record my interview **YES / NO**

I understand that if I have any further questions, comments, or concerns pertaining to this research study, I may contact research investigator at 217000597@stu.ukzn.ac.za. Or research supervisor Dr Mthokozisi Hlengwa at hlengwam1@ukzn.ac.za Additionally, I can also contact the research ethics committee HSSREC@ukzn.ac.za , Tel: 031 260 4557/8350/3587.

Participant signature: _____ Date: _____

Researcher's signature: _____ Date: _____

8.2. Appendix B: Letter to The Registrar

The Registrar:

RE: REQUEST FOR PERMISSION FOR THE GATEKEEPER'S LETTER

Dear Sir/Madam,

My name is Thulile Xulu, and I am a registered master's student in the Department of Human Applied Sciences at the University of KwaZulu-Natal. My supervisor is DR Mthokozisi wellington Hlengwa.

The proposed topic of my research is Exploration of student's perceptions and experiences of online learning at the University of KwaZulu-Natal (Howard College). The objectives of the study are:

- To explore the experiences of university students of online learning at the university of KwaZulu-Natal.
- To understand the experience of the transition of students from traditional mode of teaching and learning (Contact learning) to online learning at the university of KwaZulu-Natal.
- To investigate the benefits and challenges of online learning experienced by university students.

I am writing to ask your permission to be allowed access to your faculty, with authorization to carry out one on one semi structured interviews with students that would be my participants. I will be requesting undergraduate students from various faculties at the University of KwaZulu-Natal (Howard College) to voluntarily participate in my study, they will have the right to withdraw their information at any time. All data and conclusions made from the discussions are kept strictly confidential and anonymity will be maintained. The information will be of academic purpose only.

Should you require any further information, please do not hesitate to contact me or my supervisor. Our contact details are as follows:

Research investigator Miss Thulile Xulu at 217000597@stu.ukzn.ac.za. However, if you have problems arise you can discuss with the project leader, DR Mthokozisi Hlengwa at hlengwam1@ukzn.ac.za.

Your permission to conduct this study will be greatly appreciated.

Yours Faithfully
Thulile Xulu

8.3. Appendix C: Gatekeeper Letter



31 August 2021

Ms Thulile Xulu (SN 217000597)
School of Applied Human Sciences
College of Humanities
Howard College Campus
UKZN
Email: 217000597@stu.ukzn.ac.za hlengwam1@ukzn.ac.za

Dear Ms Xulu

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate degree, provided Ethical clearance has been obtained. We note the title of your research project is:

"Exploration of student's perspectives and experiences of online learning at the University of KwaZulu-Natal (Howard College Campus)."

It is noted that you will be constituting your sample by conducting interviews with undergraduate registered students (Taking in account the regulations imposed during lockdown ie restrictions on gatherings, travel, social distancing etc. Zoom, Skype or telephone interviews recommended) on the Howard College Campus.

Please ensure that the following appears on your notice/questionnaire:

- Ethical clearance number;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

You are not authorized to contact staff and students using the 'Microsoft Outlook' address book. Identity numbers and email addresses of individuals are not a matter of public record and are protected according to Section 14 of the South African Constitution, as well as the Protection of Public Information Act. For the release of such information over to yourself for research purposes, the University of KwaZulu-Natal will need express consent from the relevant data subjects. Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

Dr KE CLELAND: REGISTRAR

Office of the Registrar

Postal Address: Private Bag X54301, Durban, 4000, South Africa
Telephone: +27 (0)31 260 7971 Email: registrar@ukzn.ac.za Website: www.ukzn.ac.za

Founding Campuses:  Durban  Howard College  Medical School  Pietermaritzburg  Westville

INSPIRING GREATNESS

8.4. Appendix D: Ethical Clearance



10 March 2022

Thulile Xulu (217000597)
School Of Applied Human Sc
Howard College

Dear T Xulu,

Protocol reference number: HSSREC/00003759/2022

Project title: Exploration of student's perceptions and experiences of online learning at the university of KwaZulu-Natal (Howard college campus)

Degree: Masters

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 06 January 2022 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

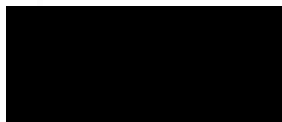
This approval is valid until 10 March 2023.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,



Professor Dipane Hialele (Chair)

/dd

Humanities and Social Sciences Research Ethics Committee

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephones: +27 (0)31 260 8050/4557/3587 Email: hssrec@ukzn.ac.za Websites: <http://research.ukzn.ac.za/Research-Ethics>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

INSPIRING GREATNESS

8.5. Appendix E: Interview Schedule

INTERVIEW SCHEDULE

Name of researcher: Thulile Xulu

Names of participants:

Place of interviews: ONLINE VIA ZOOM PLATFORM

Date of interview sessions: (TBC)

QUESTIONS

1. How has the transition from high school to university been for you? can you walk me through the journey?
2. How are you finding university life considering that teaching and learning is conducted online?
3. Do you think covid-19 and online learning has deprived you a chance to experience the university life by socialising with other peers?
4. How has online learning been to you?
5. Is online learning better than the traditional mode of teaching (contact learning)?
6. What are the threats of online learning that you have faced?
7. Does the university and lecturers provide you with support, for you to properly adjust into online learning? If yes, what kind of support do they provide, and do you find it helpful?
8. Has your academic performance been affected by the transition to online learning from contact learning?
9. What are the coping strategies that you used to cope with the challenges of online learning?

8.6. Appendix F: Similarity index report

| Masters Dissertation | | | |
|----------------------|---|--------------|----------------|
| ORIGINALITY REPORT | | | |
| 5 % | 4 % | 1 % | 3 % |
| SIMILARITY INDEX | INTERNET SOURCES | PUBLICATIONS | STUDENT PAPERS |
| PRIMARY SOURCES | | | |
| 1 | researchspace.ukzn.ac.za Internet Source | 1 % | |
| 2 | scholar.ufs.ac.za:8080 Internet Source | 1 % | |
| 3 | www.nature.com Internet Source | 1 % | |
| 4 | Submitted to University of KwaZulu-Natal Student Paper | 1 % | |
| 5 | hdl.handle.net Internet Source | <1 % | |
| 6 | ijisrt.com Internet Source | <1 % | |
| 7 | www.edukatif.org Internet Source | <1 % | |
| 8 | Submitted to University of Johannesburg Student Paper | <1 % | |
| 9 | beacon.homesandland.com Internet Source | <1 % | |