



**TEACHING AND LEARNING COPING STRATEGIES ADOPTED BY
TEENAGE MOTHERS DURING CORONAVIRUS DISEASE LOCKDOWN IN
MAKHADO MUNICIPALITY, LIMPOPO PROVINCE**

By

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DECLARATION

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ABSTRACT

Background: The COVID-19 pandemic exposed inequalities in access to technology between rich and poor, rural, and urban, girls and boys and across and within countries. The other negative social and health related impacts that COVID-19 and related restrictions had on the poorest, most marginalized, and vulnerable sectors of society are likely to have been disproportionately affected by school closures due to COVID-19. Teenage mothers living in rural areas have fewer resources such as access to the internet, smartphones, and computers to adapt to and implement measures needed to continue with online learning during school closures. The aim of the study was to explore and describe teaching and learning coping strategies adopted by teenage mothers in the rural communities of Makhado Municipality during the coronavirus disease lockdown in Limpopo Province, South Africa.

Design: The study adopted a qualitative critical participatory action research through the community engagement approach.

Methods: Purposive and snowballing recruitment were employed in this study. Methods of generation of data included semi-structured face-to-face interviews which were audio-taped, transcribed verbatim, and participatory arts were also applied to generate data. Data was analysed using qualitative thematic analysis.

Findings: Thematic analysis of data revealed that teenage mothers experienced challenges such as stigma and discrimination, stress, inability to cope with self-study, financial constraints in caring for and supporting their babies, lack of gadgets and the internet essential for home learning, and inconsistent support from parents and teachers.

Recommendations: Policies need be reviewed to address the issue of stigmatisation and discrimination in schools. Authorities in education need to be geared in enriching social change towards transformative learning and addressing the issue of the digital divide in rural communities.

Conclusion: It was concluded that the COVID-19 pandemic has broadened a huge gap between the rich and the poor, urban and rural learners. It was concluded by the researcher that there was evidence of social segregation and social injustice for teenage mothers in teaching and learning.

Keywords: *Marginalisation, vulnerable, action research, stigma, discrimination, social inclusion, social justice, self-efficacy, self-regulation.*

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LIST OF ABBREVIATIONS

AGYW	Adolescent Girls and Young Women
ANEP	National Public Education Administration
CIOMS	Council for International Organizations of Medical Sciences
CODICEN	Council of the National Administration of Public Education
CSOs	Civil Society Organizations
COVID-19	Coronavirus Disease of 2019
DBE	Department of Education
DCDT	Department of Communications and Digital Technologies
ECLAC	Economic Commission for Latin America and the Caribbean
HSSREC	Humanities and Social Sciences Research Ethics Committee
ICT	Information and Communication Technologies
IDP	Integrated Development Review Plan
NGOs	Non-Profit Organizations
OECD	Organization for Economic Cooperation and Development
PISA	Programme for International Student Assessment
RSA	Republic of South Africa
SA	South Africa
SADC	Southern African Development Community
SADTU	South African Democratic Teachers Union
SASSA	South African Social Security Agency

SCT	Social Cognitive Theory
SCLT	Social Cognitive Learning Theory
SDG	Sustainable Development Goals
SET	Self-Efficacy Theory
SSA	Sub-Saharan Africa
STATSSA	Statistics South Africa
UKZN	University of KwaZulu-Natal
UNESCO	United Nations Environmental, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UNPFA	United Nations Population Fund
WCED	Western Cape Education Department
WHO	World Health Organization

CHAPTER 1: OVERVIEW OF THE STUDY

1.1 INTRODUCTION

A case of corona virus (SARS-CoV-2) causing severe acute respiratory syndrome (SARS) was first identified in the Chinese city in Wuhan, Hubei Province, in December 2019 (Lavazza and Farina, 2020). On February 2020, the World Health Organization (WHO) officially named the disease caused by the novel coronavirus as Corona Virus Disease 2019 (COVID-19) (Lavazza and Farina, 2020). The organization (WHO) declared that teaching and learning should continue online at home during lockdown which affected the majority of the learners worldwide (WHO, 2020). The shift from classroom based to digital learning required access to the internet, electricity and gadgets which made it difficult for teenage mothers living in poor rural areas to cope with learning (Duby, Jonas et al., 2022). This chapter presents the introduction and background of the study, the aims, the objectives, and research questions, research design and methods, ethical considerations, and measures of trustworthiness.

1.2 BACKGROUND

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics at the height of the school closures in March 2020 as part of the containment measures to curb the spread of the virus, an estimated 1.54 billion schools and university students were sent home (UNICEF, 2020a). A study conducted by Adom et al. (2021) in Poland indicated that there were accessibility and other problems faced during virtual education, which included availability of devices or gadgets, network signal strength, electricity availability and parents' affordability of children's educational needs. The school closures affected, 89% of the 1.73 billion young people enrolled in education globally, and 743 million of those children were females (Adom et al., 2021). Globally, between 20 March 2020 and 2 February 2021, schools have been fully closed for an average of 95 instruction days, with countries in the Eastern and Southern African region being most affected with an average of 101 days (UNICEF, 2021b). In August 2021, six months later schools in countries such as Uganda, Mozambique and Zambia continued to be completely closed due to a surge

of COVID-19 cases (Parkes and Datzberger, 2021). Teenage mothers are being challenged with options like taking days off school just to be with her baby, reentry, and continuation (Zulaika, Bulbanelli et al., 2021). The decision to close the schools was met with challenges experienced by communities at large.

The COVID-19 pandemic has exposed inequalities in access to technology, such as between rich and poor, rural and urban, girls and boys, and across and within countries (UNICEF, 2020b). A study in Europe by Di Pietro et al. (2020) indicated that the parents from less advantaged backgrounds are more likely to experience the stress of sharing a limited space and limited digital devices at home. Additionally, not all parents possess the digital skills required to help their children deal with the technical challenges of online learning. The emergency remote learning was marked with several challenges across all learners globally. Adolescents in Nairobi reported accessing some form of remote learning albeit with various challenges, with only one in five adolescents' accessing learning materials via mobile phones, television and/or radio (Mwabe, Austrian et al., 2021). About 97% of adolescents in Kenya reported that, despite attempting remote learning, they were faced with multiple challenges limiting the quality of their learning, including reduced time for learning due to household chores, child labour, and distractions in the home environment (Zulaika, Bulbanelli et al., 2021). In South Africa's North-West and Limpopo provinces only 3,6% and 1.6% respectively have access to the internet at home (Hayratiyan, 2020). Similarly, there have been measures employed to mitigate the challenges to make sure that no one was left behind.

Online platforms have been the first to be rolled out to enable children to continue learning from home. They are generally the most effective learning modality in getting some form of learning up and running (UNICEF, 2020b). UNICEF came up with some plans for guidance on distance learning for the government and communities to ensure continuity of learning which included the teachers continuing to be involved to guide their students as well as support parents during school closures (UNICEF, 2020b). The guidance included establishing a one-stop government portal with key resources which provided comprehensive one-stop guidance and information on the COVID-19 education response, and information regarding the different learning modalities being

rolled out (UNICEF, 2020b). England's (United Kingdom) financial support for schools was launched in April 2020 and provided funding to schools to support them with costs associated with coronavirus (Schleicher, 2020). The schools in South Africa in all provinces put together plans on how they would deal with measures to support grade 12 learners including the extent of interventions other than classroom teaching (Nchabeleng, 2020). The Department of Basic Education (DBE) has made efforts to support schools aside from normal classroom teaching through digital resources, worksheets, pace setters and radio broadcasts (Nchabeleng, 2020).

Learning mitigating strategies put in place for continuation of learning through the use of different online teaching methods were implemented successfully and were effective for most countries. Adom et al. (2021) indicated that technology provided people with a platform of an equitable approach to focus and fostering an inclusive virtual teaching and learning experience to mitigate the likely worsening equity gaps in the education process. The survey in England indicated that most parents of secondary school learners were struggling to provide home schooling, but still have the capacity to aid through access to technology, internet materials and private tutoring (Adediran, 2020). In Burkina Faso, a platform (Faso Education) was officially launched with digital educational content for teachers and learners from pre-school to secondary levels (Alcazar et al., 2020). In mitigating the disruption to learning, the Algerian Ministry of Education made available material on YouTube for students within K-12 sector (Faturoti, 2022). A study conducted by Jantjies (2020) indicated that the Department of Basic Education (DBE) in South Africa created a COVID-19 guide for teachers addressing potential resources that they could use when teaching from home, such as one-on-one consultations using platforms like Zoom, WhatsApp and Google messaging services that allow video calls to keep supporting learners.

Teenage mothers living in rural areas are less likely to have resources such as access to the internet, smartphones, and computers to adapt and implement measures needed to continue with virtual learning during school closures (Human Rights Watch, 2020). What was not known is how teenage mothers were coping with both learning and parenting during the lockdown and beyond.

1.3 PROBLEM STATEMENT

As noted from the background above, the sudden shift from classroom-based teaching and learning to digital or virtual teaching has been reported to have both positive and negative impacts for assorted reasons. The latest available data reveals that only 10.6% of South African households had internet access in the homes (Statistics South Africa, 2020). The reality is that online learning seemed not to be the sole option that ensures equity in education in low-and-middle-income countries. For rural and poor children, online learning is virtually impossible, and it certainly does not ensure equality and access to education (Pillay, 2021). Moreover, lack of facilities or closure of internet cafés defeated the purpose of championing online learning as a strategy to combat the effects of COVID-19. In the addition to the issues relating to lack of internet gadgets and connectivity, it was reported that most rural teachers in South Africa are unable to use online learning apps, which makes it difficult for these teachers to help learners (Dube, 2020). For teenage mothers such challenges expound on balancing new learning skills and parenting.

There are studies conducted focusing on teenage mothering and their experiences, education, and socio-economic factors for decades. In South Africa, Duby et al. (2022) examined the effects of COVID-19 and lockdowns and educational experience among adolescent girls and young women (AGYW). The findings revealed that being out of school significantly reduces AGYW's social network, interaction and support from peers and educators, poor access to health facilities, and sexual exploitations among other challenges. Remarkably, the South African birth of children from teenage mothers increased from 130,000 in 2019 to 136,386 in 2020 (Sepeng et al., 2023). At the same breath, Sepeng and colleagues reported that in 2023 nearly 775 teenagers were pregnant in rural communities of Vuwani village, Vhembe district in Limpopo province South Africa. Given that Limpopo Province is the poorest in RSA, such increase in teenage pregnancies diminishes the improvement on socio-economic status of such young mothers. Similarly, studies have reported poor socioeconomic factors as major drawbacks for teenage mothers to complete a high school diploma or a university degree, limiting their future employment (Sepeng et al., 2023).

It was against this backdrop that the researcher sought to explore coping strategies among teenage mothers in Limpopo Province. According to the knowledge of the researcher, there were no known recent contexts-specific challenges and coping strategies among teenage mothers in the rural communities of Makhado Municipality, Vhembe district in Limpopo province of South Africa using arts-based participatory action research, and hence the need for the study.

1.4 PURPOSE OF THE STUDY

The main aim of the study was to explore and describe the teaching and learning coping strategies adopted by teenage mothers in the rural communities of Makhado Municipality during coronavirus disease lockdown in Limpopo, South Africa.

1.5 RESEARCH OBJECTIVES AND QUESTIONS

1.5.1 Research objectives

To explore and describe the teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown in the rural communities of Makhado Municipality in Limpopo, South Africa.

To describe the evidence of successful teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown in the rural communities of Makhado Municipality in Limpopo, South Africa.

1.5.2 Research questions

Research question refers to a statement of the specific query the researcher wants to answer to address a research problem (Polit and Beck, 2020).

What are the teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown in the rural communities of Makhado Municipality in Limpopo, South Africa?

What teaching and learning coping strategies were successfully used by teenage mothers during coronavirus disease lockdown in the rural communities of Makhado Municipality in Limpopo, South Africa?

1.6 SIGNIFICANCE OF THE STUDY

The significance of the study conveys the importance of the problem for different audiences that may profit from reading and using the study (Creswell and Creswell, 2022). The study may have the following significance:

1.6.1 Policy making

A report of the study's findings will be provided to the health authorities, community leaders and the Department of Education. The intention is that these stakeholders will utilise the findings in teaching and learning and policy formulation to support teenage mothers learning from home in preparation for future pandemics. Kalb (2021) revealed that teenage mothers need financial support because they are more likely to be poor and experience financial hardships. Furthermore, young teenage mothers have much lower participation in employment, which leads to much higher dependence on income support (Kalb, 2021). It is anticipated that these findings will assist by adding to available evidence for measures to be taken to enact positive social change, inclusion and transformation in teaching and learning for teenage mothers.

1.6.2 Nursing practice

The study findings when utilised will help school health professionals in promoting mental health and offering psychological and social support to teenage mothers to cope with academic work and mothering during the COVID-19 lockdown. The findings will further assist in optimising the need for co-parenting between teenage mothers and their partners. The community engagement approach will redress marginalisation of teenage mothers and will provide evidence of unmet needs of their children due to COVID-19 lockdown in SA.

1.6.3 Nursing education

The findings of the study will expectantly inform authorities to enhance social change and transformation of the marginalised and vulnerable groups (females) in teaching and learning to ensure equality in disadvantaged and rural communities. The findings of the study will help the nursing colleges to develop a curriculum which accommodates and supports teenage mothers to continue with education.

1.6.4 Nursing research

The study aims to address the scientific gap by exploring the impact and challenges of COVID-19 lockdown on teenage mothers. The study findings and recommendations may serve as a point of reference or guidelines for prospective researchers in nursing and public health to further conduct studies for continued support of teenage mothers not coping in teaching and learning due to the pandemic.

1.7 OPERATIONAL DEFINITIONS

The researcher seeks to clarify and define key terms used in the study. The following terms have been operationalised for this study:

Coping is dealing effectively with something difficult (Collins Dictionary, 2020).

Strategy is a plan of action designed to achieve a long-term objective (Collins Dictionary, 2020).

UNICEF defines **teenage mother** as “a teenage girl, usually between the ages of 13-19 who become a parent to their children”. According to WHO, adolescent mothers are women between the ages of 10 and 19 who become pregnant and parents to their children. In this study, a teenage mother is a parent to their children who is aged 13-19 attending school.

COVID-19 is defined as an illness in humans caused by a novel coronavirus, capable of producing severe symptoms and in some cases death, which was identified amid an outbreak of respiratory illness cases in Wuhan City, China (WHO, 2020).

Lockdown is a set of measures aimed at reducing transmission of COVID-19 that are mandatory, applied indiscriminately to a general population and involve some restrictions on the established pattern of social and economic life to prevent the spread of the virus (WHO, 2020). According to Collins Dictionary (2020), lockdown is defined as “the imposition of stringent restrictions on travel, social interaction, and access to public places”.

1.8 THEORETICAL FRAMEWORK

Bandura’s Social Cognitive Learning Theory (SCLT) was used in this study as it assumes that learning occurs in a social context with a dynamic and reciprocal interaction between one’s behaviour, personal factors, and environmental conditions (de la Fuente et al., 2022). The internal principle of SCLT sees people only as partial products of their environments (Manik et al., 2022). It is important that people create beneficial environments to exercise control over them (Bandura, 1997; Manik et al., 2022). People can influence what they become by selecting the environment carefully, and the choices they make are influenced by their beliefs and capabilities (Bandura, 1997). Bandura’s triadic reciprocity is define a human as a triadic, dynamic, and reciprocal interaction of personal factors, behaviour, and the environment which is illustrated in Figure 1 below. Environmental factors such as learning from home due to lockdown with the lack of internet and load shedding can result in inability to cope (behaviour) with their schoolwork for teenage mothers with low self-efficacy (personal factors). Teenage mothers who are intelligent and possess high self-efficacy skills can learn on their own from home without guidance and tend to cope and progress well academically.

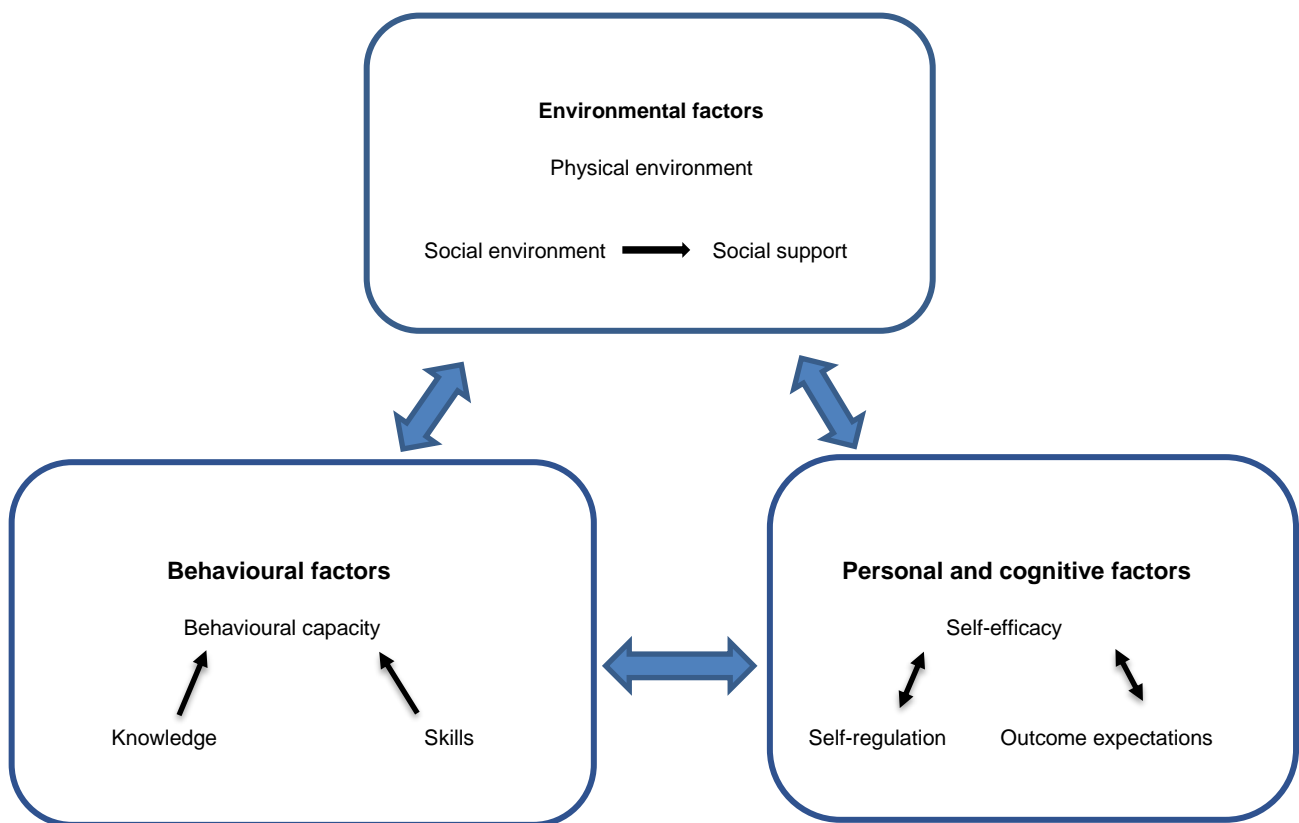


Figure 1: Bandura's model reflecting Social Cognitive Theory (Research Gate)

Self-efficacy in Bandura's theory introduced the context of an explanatory model of human behaviour, in which self-efficacy causally influences expected outcomes of behaviour (Lopez-Garrido, 2023). Self-efficacy refers to the level of a person's confidence in his or her ability to successfully perform behaviour (Lopez-Garrido, 2023). Perceived self-efficacy consists of personal belief of being able to face new situations, difficulties, and challenges (Bandura, 1997). Self-regulation is a self-regulated behaviour that results in the fulfilment of one's constructed goals and standards (Ormrod, 2014). Learners with low self-efficacy are less likely to seek assistance or to ask for help when they face challenges, where seeking for help is a self-regulation strategy (Ormrod, 2014; Hayat et al., 2020). These means that teenage mothers with low self-efficacy may not ask for assistance and may end up not coping with teaching and learning challenges. Hayat et al. (2020) indicated that people with high efficacy are more likely to view difficult tasks as something to be mastered rather than something to be avoided while people with weak efficacy are more likely to avoid

challenging tasks and finally focus on personal failings and negative outcomes. Teenage mothers with high self-efficacy have confidence in their own abilities to progress with schoolwork and tend to face stressful demands and challenges with confidence, despite the demands and changes brought by lockdown (Hayat et al., 2020). This cheerful outlook makes the adoption of positive and effective coping strategies more likely. Bandura highlighted that emotional self-efficacy reflects a person's abilities to manage negative emotions (anger, sadness, and fear) and to express positive ones (joy, enthusiasm, and pride); it plays a pivotal role in the management of different stressors and in influencing depression (Cattellino et al., 2021). Teenage mothers who possess positive emotional self-efficacy were able to express positive emotions when coping with challenges brought about by the shift from classroom-based teaching and learning to virtual learning.

1.9 METHODOLOGY

1.9.1 Research design

Research design provides a blueprint for maximising control over factors that could interfere with the study's desired outcome (Gray and Grove, 2019). Research methods are the techniques researchers use to structure a study within the chosen design (Polit and Beck, 2020; Gray and Grove, 2021). The study adopted a qualitative, critical participatory action research through the community engagement approach. Community based participatory research is an approach which engages multiple stakeholders including the public and community providers who affect and are affected by a problem of concern and aims to combine knowledge with taking actions, including social change, to improve health (Creswell and Creswell, 2022). Arts-based research involves adapting the tenets of the creative arts such as photographs, drawings, scrapbooks and poetry in a social research project (Abma et al., 2019). The critical participatory action research was chosen based on its tenets to promote social justice, to create social change, improve social justice and to work for the benefit of teenage mothers (Kemmis et al., 2014; Flick, 2020).

The seminal scholar and author Kemmis emphasized that PAR focuses on inclusion, participation and voice in the social practices that involve and affect participants (Kemmis et al., 2014). Furthermore, the teenage mothers were active in making informed decisions throughout all aspects of the research process for the primary purpose of imparting contextual transformation and capacity development. The approach enhanced social inclusion, democracy, addressing inequalities and redressing marginalisation of those teenage mothers by having an opportunity to express themselves and encourage their voices to be heard (Abma et al., 2019; Chevalier and Buckles, 2019). Details on the research design are in chapter 3, section 3.2.

1.9.2 Research setting

The study setting refers to the place where participants are recruited from and the data are collected (Lobiondo-Wood and Haber, 2022). The study was conducted in the Makhado Municipality, Vhembe district, Limpopo Province (Makhado). The researcher decided to conduct the study in Limpopo Province because it is known to be the poorest, with high teenage pregnancy (Statistics South Africa, 2019). Vhembe district is one of the districts in Limpopo Province and it has four local municipalities that are Musina, Mutale, Thulamela, and Makhado (Makhado IDP, 2019/20). For detailed information see chapter 3 section 3.4.1

1.9.3 Study population

Population consists of an entire group of people or type of element that represents the focus of the research (Flick, 2020). The target population for this study was the teenage mothers aged between 16 and 19 years in the rural village of Makhado Municipality. The target population is the population that the sample will be drawn from (Gray and Grove, 2021). It includes all individuals who possess the desired characteristics (inclusion criteria) to participate in the study (Fouché et al. (2021). The accessible population is the portion of target population to which the researcher has reasonable access (Gray and Grove, 2021; Fouché et al, 2021). In this study, the population was all teenage mothers enrolled for schooling in the 2020 and 2021 academic year. Details are chapter 3 section 3.4.3.

1.9.4 Sampling and recruitment

The researcher employed purposive sampling whereby volunteer informants were supplemented with new participants through snowballing by asking early informants to refer other study participants (Gray and Grove, 2019). A total sample of at least 11 teenage mothers from Makhado was approached to participate in the study. Details of sampling and recruitment are in chapter 3, section 3.4.4.

1.9.5 Inclusion and exclusion criteria

Inclusion criteria are characteristics that a subject or element must possess to be part of the target population (Gray and Grove, 2021). Exclusion criteria are characteristics that can cause a person or element to be eliminated or excluded from the target population (Gray and Grove, 2021).

1.9.6.1 Inclusion criteria

- All teenage mothers who were enrolled for schooling in the 2020-2021 academic year and were willing participate in the study.
- All teenage mothers who were willing to participate in the study.
- All teenage mothers' years who signed an informed consent
- All teenage mothers who were available during data collection sessions.

1.9.6.2 Exclusion criteria

- All teenage mothers who did not give assent to be part of the study.
- All teenage mothers who were not enrolled for schooling in the 2020-2021 academic years.
- All teenage mothers who were not willing to participate in the study.

1.9.6 Data generation methods and instrument

Data collection is a series of interrelated activities aimed at gathering good information to answer emerging research questions (Creswell and Creswell, 2022). The semi-structured, face-to-face in-depth interviews were the method of data generation with each consenting participant as the researcher was seeking to explore and describe

the experiences, and coping strategies used by the participants in teaching and learning during lockdown. For a detailed methods and techniques of data generation see chapter 3 in section 3.5 of this study.

1.9.7 Measures to ensure trustworthiness

The measures to ensure trustworthiness in this study were based on Lincoln and Guba as cited in Polit and Beck (2020). The criteria for assessing and ensuring trustworthiness of a qualitative inquiry are credibility, transferability, dependability, confirmability, and authenticity. The strategies were described with reference to each of the five above mentioned criteria. Details are in chapter 3 in section 3.7.

1.9.8 Data analysis

The researcher employed thematic data analysis by transcribing text from interviews and observations into word processing files for analysis (Creswell and Clark, 2018). The data was generated from the audio-taped individual interviews with the participants and was transcribed verbatim (word-for-word) and was confirmed with the participants. For comprehensive details on data analysis methods see chapter 4, section 4.2.2.

1.10 ETHICAL CONSIDERATIONS

Researchers require permission to generate data from individuals and sites. This permission often needs to be sought from multiple individuals and levels in organisations, such as from individuals who are in charge of sites and from people providing data (Creswell and Creswell, 2022). Fouché et al. (2021) indicated that research involving human “subjects” must be reviewed by Institutional Review Board to confirm that the rights and welfare of the individuals in the study will be protected. In this study, ethical approval and permission was obtained from the UKZN Humanities & Social Sciences Research Ethics Committee (UKZNHSSREC) where the study was registered, and from the local community leaders, parents and teenage mothers. The following ethical principles according to Gray and Grove (2019) were adhered to: informed consent, confidentiality and anonymity, beneficence, right to privacy, right to

fair selection of participants, respect for others, promotion of social justice and social value. For full details see chapter 3, section 3.8.

1.11 DIVISION OF CHAPTERS

The study report on teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown in the rural communities of Makhado Municipality in Limpopo, South Africa presents the following chapters:

Chapter 1 presents the overview of the study. In this chapter the researcher described concepts related to teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown. The research problem, the research questions, and the aim and objectives of the study were discussed, while a brief review of the literature and theoretical framework underpinning the study were also explained, and a concise description of the research methodology was given, and the design of the study was explained. The researcher clarified the operational definitions of the concepts that are related to the study such as teenage mother, coping, strategies, lockdown, COVID-19. The researcher utilised the chapter to indicate the adherence to the ethical considerations and trustworthiness. Finally, the significance of the study was discussed.

Chapter 2 reviews the literature on teaching and learning challenges and coping strategies during the coronavirus disease-19 lockdown. This chapter is divided into a number of sub-topics, namely, teenage pregnancy and motherhood; challenges faced by learners in teaching and learning during COVID-19 lockdown; threats to virtual learning during lockdown; measures employed to mitigate the challenges and threats faced in teaching and learning during COVID-19 lockdown and evidence of success in implementing home-schooling and online platforms for continuity of learning during lockdown. Finally, the theoretical framework of coping strategies on teaching and learning is articulated through Albert Bandura's Social Cognitive Theory.

Chapter 3 outlines the research methodology approach (participatory action) adopted to explore and describe experiences, challenges and coping among teenage mothers

during learning in times of coronavirus lockdown. It discusses in detail the research design, the paradigm within which the study is positioned, the sample recruitment methods, methods applied for data generation, data analysis and clarification, and ethical considerations.

Chapter 4 encompasses a comprehensive analysis of the data generated. Thematic analysis was used to analyse the transcribed texts and participatory arts, aimed at identifying main and sub-themes. The following themes were developed: social disconnectedness, inability to cope with online learning, challenges experienced by teenage mothers, environment for home learning during lockdown, coping mechanisms used to learn during lockdown and learning support received by teenage mothers. Literature control in relation to the findings was done to support the themes which were developed from analysed data.

Chapter 5: presents a summary of findings, conclusions, limitations of the study and recommendations for further studies that are aimed at addressing the teaching and learning coping strategies used by teenage mothers in the near future and further concludes by emphasising the challenges encountered by teenage mothers during motherhood and, lastly, concludes by stressing the issues confronted by learning mothers in rural and underprivileged communities.

1.12 CHAPTER SUMMARY

This chapter introduced the reader to an exploration into and description of the teaching and learning experiences of teenage mothers and the coping strategies adopted during coronavirus disease lockdown. The background and the statement of the problem for the study were outlined in relation to the research question and aim of the study. The researcher briefly clarified the concepts of the research design, methods, study population, and sample and sampling procedures, data generation methods, data analysis and ethical considerations which are precisely addressed in chapter 3. Finally, the division of chapters were outlined. The following chapter presents the literature review of the study.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The study aimed at exploring and describing the teaching and learning coping strategies adopted by teenage mothers during COVID-19 lockdown in Makhado Municipality, Vhembe District in Limpopo. This chapter reviews the literature surrounding teenage mothers' challenges and threats to education and coping with their academic work during the difficult times of the pandemic. The literature review of a research report is an interpretive, organised, and written presentation of what the study's author has read (Gray and Grove, 2021). According to Fouché (2021) a literature review is a mechanism for ensuring that a study is rooted in an existing body of knowledge and the discipline within which the study is conducted. Polit and Beck (2022) defined a literature review as a critical summary of research on a topic of interest, often prepared to put a research problem in context. The literature consists of all written sources relevant to a selected topic (Gray and Grove, 2021). The purpose of conducting a review of the literature is to discover the most recent, and the most relevant, information about a particular phenomenon (Gray and Grove, 2021). The researcher presents literature for the purpose of this study under the following headings:

- Teenage pregnancy and motherhood.
- Challenges faced by learners in teaching and learning during COVID-19 lockdown.
- Threats to virtual learning during lockdown.
- Measures employed to mitigate the challenges and threats faced in teaching and learning during COVID-19 lockdown.
- Evidence of success in implementing home-schooling and online platform for continuity of learning during lockdown.
- Theoretical framework underpinning the study.

2.2 TEENAGE PREGNANCY AND MOTHERHOOD

Early and unintended pregnancy is a global concern affecting both high-income countries and low and middle-income countries (Olszewski and Diaz, 2019; UNICEF 2021; Ahinkorah et al., 2021). For adolescent girls aged 10-19 years, experiencing pregnancy while still at school often means facing harsh social sanctions and difficult choices that have life-long consequences (UNICEF, 2021). Moreover, becoming pregnant could mean expulsion from home and school; vulnerability to early marriage; being shamed and stigmatised by family, community members and peers; increased vulnerability to violence and abuse; and greater poverty and economic hardship (UNICEF, 2021; Barron et al., 2022; UNFPA, 2022). Teenage girls living in poor rural contexts face multiple adversities (Singh and Naicker, 2019). The outcomes for those who become pregnant and have babies while still in school and depending on others for their own survival and that of their babies are more severe (Singh and Naicker, 2019). Furthermore, the harmful effects of early pregnancy compromise their opportunities for economic empowerment, and thereby have the potential of reproducing the cycle of poverty.

According to the World Health Organization (WHO) (2021) an estimated 21 million girls aged 15 to 19 years in developing regions become pregnant every year, and approximately 12 million of them give birth. Estimates also suggest that 2.5 million girls aged under 16 years give birth every year (WHO, 2021). WHO (2021) stated that the estimated number of child brides worldwide in 2021 was 650 million. Moreover, child marriage poses an increased risk of pregnancy for girls who are married off at a very early age, because these girls usually have limited opportunities to make decisions about postponing childbearing and using contraception. Early pregnancies among adolescents have major health and social consequences that result from curtailment of the girl's education and societal loss of human resources (WHO, 2019; StatsSA, 2022; Barron et al., 2022). According to a study by the organisation Save the Children (2019), 13 million children are born to women under 20 worldwide, and 90% of these births take place in developing countries (Gunawardena et al., 2019).

The complications resulting from pregnancy and childbirth are the leading cause of maternal mortality in young women aged 15-19, with the highest at risk being in Africa, Afghanistan, Bangladesh, Guatemala, Haiti, Nepal, Nicaragua and Yemen (Gunawardena et al., 2019; UNICEF, 2021). Sinwanza et al. (2022) highlighted that evidence from sub-Saharan Africa (SSA) indicates that 35% of pregnancies among 15–19-year-olds were unplanned, unwanted, or untimed and that teenagers' relationships were unstable. Teenage pregnancy is associated with several issues such as poverty, low education levels, and the lack of awareness about sex and pregnancy prevention (Ahinkorah et al., 2021; Sinwanza et al., 2022). According to Sinwanza et al. (2022) SSA countries lead the world in teen pregnancies with Niger on the top list at 203.604 births per 100,000 teenage mothers, Mozambique 142.533, Guinea 141.672, Chad 137.173, Malawi 136.972, and Cote d'Ivoire 135.464. Globally, adolescent pregnancy is expected to increase by 2030, with high concentrations in SSA (UNICEF, 2021; Ahinkorah et al., 2021; Sinwanza et al., 2022). Currently the highest teenage pregnancy rates are recorded in Africa and records show high prevalence across the SSA regions with 16.3% in Eastern, 27.9% in Western, and 28.9% in Southern Africa (Sinwanza et al., 2022).

Early pregnancy and motherhood remain a tremendous public health concern (Terefe, 2022; Sinwanza et al., 2022). According to Terefe (2022) some African countries' reports depicted that the overall rate of early pregnancy was 18% in Kenya, 29% in Malawi and Zambia, with Ethiopia ranging from 3 to 23% in different regional states. Other multicounty analyses in SSA revealed 44.3% in Congo, 36.5% in Rwanda, and 75.6% in Chad (Terefe, 2022). Studies conducted in the west and central African nations, including the Gambia, have revealed a teenage pregnancy rate of 49% in the Central African Republic and 16% in Senegal with early marriage variations from 61% in Niger to 6% in Ghana (Terefe, 2022). Many girls who are pregnant drop out of school, which can impact on their educational and employment opportunities (Barron et al., 2022; WHO, 2021). According to Kamer (2022) Niger had the highest adolescent fertility rate in Africa as of 2020. The country registered 177.5 births per 1,000 women aged 15-19 years, and Mali followed with 162.3 births per 1,000 girls.

The countries in North Africa presented lower adolescent fertility rates and, by contrast, Tunisia had 7.9 births per 1,000 adolescents in 2020, while Libya measured an even lower rate at 5.6 (Kamer, 2022). In South Africa, adolescents aged 10-19 represent a significant proportion of the population at 17, 4% and contribute to 2.1% of the total mortality (StatsSA, 2022). A total of 106 383 registered live births occurred among adolescents 10-19 years in 2019 (StatsSA, 2022). Amidst registered live births that occurred among adolescents, KwaZulu-Natal recorded a higher percentage than other provinces at 24,7%, followed by the Eastern Cape and Limpopo, both at 14,4%, Gauteng at 13,7% and Mpumalanga at 10,0% (StatsSA, 2022). The remaining provinces reported less than 10% of registered live births with the Western Cape at 8,3%, Free State at 4,8%, Northwest at 6,3% and Northern Cape with the lowest percentage of 3,2% (StatsSA, 2022). The Department of Education's (DBE) analysis of the General Household Survey of 2019 on schooling found that the average pregnancy rate of girls aged ≥ 14 ranged between 3% and 4% during the period 2010 - 2019. It also revealed that pregnancy rates increased significantly in grades 10 - 12 compared with grades 8 and 9 (Barron et al., 2022).

The substantial surge of figures in 2020 was mostly attributed to the COVID-19 pandemic and the subsequent lockdowns, which resulted in learners being out of school for extended periods (O'Regan, 2021). In November 2021, the Department of Statistics of the Republic of South Africa communicated that a total of 899 303 children were born in 2020, with 34 587 babies being born from mothers aged 17 years or younger (Molek and Bellizi, 2022). Of these 34 587 births from teenage mothers, 16 042 were aged 17 years of age (Molek and Bellizi, 2022). Such figures are particularly concerning due to the increased risk of maternal complications for early motherhood which can subsequently lead to low neonatal survival rates (Molek and Bellizi, 2022). Additionally, early motherhood forces young girls to prematurely assume an adult role which they are not emotionally and physically prepared for, thus potentially affecting maternal health, the mother-child relationship, and healthy development of their children.

2.3 CHALLENGES FACED BY LEARNERS IN TEACHING AND LEARNING DURING COVID-19 LOCKDOWN

Globally, the sudden closure of schools and education institutions as a response to COVID-19 has resulted in rapid and dramatic shifts to replace in-person teaching with various forms of technology based, remote and distance education (UNESCO, 2021a). The pandemic limited student opportunity for interactions with peers and teachers and for individualised attention thereby decreasing student engagement, participation and learning while augmenting the amount of at-home work (Reimers, 2022). Moreover, home learning, combined with greater responsibilities and disruptions, diminished learning time while increasing stress and anxiety, and for some students aggravated mental health challenges. The adoption of remote learning was carried out with urgency, and institutions had little time to make adequate preparations (Oluka et al., 2021). Compensatory learning at home was essential to ensure coverage of the curriculum due to the rotational timetabling models established after schools reopened (Hoadley, 2020). Schools in many countries faced unprecedented challenges resulting from the COVID-19 virus pandemic (Soland et al., 2020).

School closures at a short time created severe disruption, and head teachers had to mobilise staff to teach remotely with little preparation or training time (Bubb and Jones, 2020; Soland et al., 2020). Additionally, teachers struggled to adapt content for an online platform, and parents had to balance work obligations with caring for and educating their own children during lockdown (Soland et al., 2020). Bubb and Jones (2020) highlighted that the concern about the impact on pupil progress was widespread, with fears that home-schooling would widen the attainment gap between children from poor homes and those from more affluent backgrounds. Access to digital devices and reliable internet connection was related to social background (Thorn and Vincent-Lancrin, 2022). In the United Kingdom, lack of devices was more often cited by parents as a reason for their children struggling to continue with their education in low-income households than high-income ones (Thorn and Vincent-Lancrin, 2022). According to Stelitano et al., (2020) teachers in the United States working in high poverty schools were significantly more likely to report that their students lacked access to the internet and devices at home. School leaders were faced with the task

of handling crisis situations beyond any existing scope of their role (Bubb and Jones, 2020; Thorn and Vincent-Lancrin, 2022). The head teachers had to be a source of support to parents, governors, staff and their senior leadership teams, and were put in the position of making decisions and giving advice and guidance, even when they had limited information and solutions were in any case unclear (Bubb and Jones, 2020). The study conducted by Sharp et al. (2020) to investigate the impact of COVID-19 on mainstream primary and secondary schools in England revealed that more resources were required to enable schools to provide effective and efficient in-school and remote learning activities simultaneously. There was curriculum learning loss due to teachers not having received training in remote learning support and feeling unable to teach at their normal standard (Sharp et al., 2020). The pandemic has affected students' rights to quality, safe and inclusive education and social engagement with peers and educators (Jaramillo, 2020). In Southern Africa, digital learning challenges are more acute in rural communities with low levels of material resources, lack of internet infrastructure and information and communications technology (ICT) illiteracy (Makute et al., 2020; MIET Africa, 2021).

The exploratory study conducted in six Southern African Development Community (SADC) member states – namely Lesotho, Madagascar, Malawi, Namibia, Zambia and Zimbabwe - guided by available evidence on the analysis of COVID-19, tried to mitigate the loss of learning by instituting virtual or hybrid classes for learners (MIET Africa, 2021). The SADC government and Civil Society Organizations (CSOs) provided learners with computers, tablets and internet access and arranged teaching through instructional packages and printed resources such as notes, worksheets and printouts (MIET Africa, 2021). Parents in Zimbabwe indicated that their children were struggling with online learning as a result of limited connectivity as outlined by the parents of primary school children. “Kids’ school opened a virtual class but are having challenge to use interactive classes like Goggle class, and end up using WhatsApp, sending voice notes and also assignments” (Makute et al., 2020). The effects of the COVID-19 pandemic and related school closures on education provision, learning and well-being were severe for most children (Save the Children, 2021).

Fricker and Alhattab (2021) highlighted the negative impact of not being at school for a long period due to COVID-19, which includes the loss of learning, emotional distress, exposure to violence and abuse and inadequate socialisation. The sudden shift from classroom-based to remote learning had a significant effect on the uses of educational technology in schooling, requiring swift adaptation by teachers and pupils to the features of the digital platforms thrust upon them (Global Monitoring Report, 2020; Patel et al., 2020). Adolescence is a challenging phase in life for many reasons, but the COVID-19 pandemic, related lockdowns and school closures have exacerbated challenges and stress, particularly related to educational attainment (Favara et al., 2021). As with the other negative social and health related impacts that COVID-19 and related restrictions have had, the poorest, most marginalised and vulnerable sectors of society are likely to have been disproportionately affected by the educational impacts of COVID-19 related school closures and educational disruptions (Favara et al., 2021). The closure of educational institutions during the COVID-19 pandemic has not only reduced educational progress and learning globally but has also interrupted the functioning of education systems and disrupted other social functions that educational institutions fulfil (UNESCO, 2021a).

According to Nkosi and Pretorius (2019) educators perceived school attendance as largely affected by teenage pregnancy and they stated that school attendance is also disturbed by babysitting arrangements and the health of the child. This is because in most cases the teenagers have no one to look after their babies, so they have to juggle being at school and also having to take care of the child at the same time, which is overwhelming for them (Nkosi and Pretorius, 2019). Maemeko et al. (2018) indicated that from the first world countries to the third world countries this problem has been a source of worry for policy makers, social workers, and other human service providers due to its negative repercussions on the girl-child. Gender related vulnerabilities and inequalities, including increased experiences of violence and unintended pregnancies, mean that female learners are at higher risk of school disengagement and attrition due to COVID-19 disruptions than their male counterparts (Van der Berg et al., 2020; UNESCO, 2021a). Being out of school significantly reduces Adolescent Girls and Young Women's (AGYW) social network, their interaction and support from peers and

educators, access to sexual and reproductive information and services, and safe spaces, which result in increased vulnerability to sexual violence and exploitation, early marriage, and unintended pregnancies (Rafaeli and Hutchinson, 2020). Evidence also suggests a gender gap in digital literacy skills in sub-Saharan Africa; consequentially, AGYW are more likely than their male counterparts to have experienced learning losses during the pandemic due to gender disparities in accessing and benefiting from online learning, including social inequalities and technological constraints (Rafaeli and Hutchinson, 2020; Van der Berg et al., 2020; Crompton et al., 2021). According to Zulaika et al. (2021) the COVID-19 pandemic reached Kenya in March 2020, and with the first case came nationwide curfews, lockdowns, and restrictions of movement. As part of the containment measures, the Kenyan government shut all schools from March 2020 until January 2021 countrywide, disrupting education for millions of students (Zulaika et al., 2021). Moreover, while all learners were affected, experts have voiced concern that the devastating social and economic costs will be felt most acutely by the most vulnerable students. According to Maemeko et al. (2018) managing as well as caring for an infant and devoting much time to schoolwork is a great challenge for these teen parents.

The study by Maemeko et al. (2018) also revealed that the birth of a child marks the end of schooling for these teen parents. The everyday lives of girls have been overturned by the pandemic, and their physical and mental health, their education, and the economic circumstances of their families and communities have been affected (UNICEF, 2020b). Many students shared feelings of stress, anxiety, isolation, and depression, which they linked to the lack of contact with their school community. “It is, stressful when I have to study all alone,” said Makena M., 17, in Kenya (Human Rights Watch, 2021). Over and above, girls are often expected to take on childcare responsibilities and household chores. Lack of access to radios, television, computers, internet, and data left many students unable to engage in remote learning (Human Rights Watch, 2021). Additionally, children living in rural areas are less likely to have resources to adapt and implement measures needed to continue education during school closures, including access to the internet and flexibility to shift school calendars, which have been adjusted to fit seasonal harvests (Human Rights Watch,

2021). The primary, secondary and tertiary education system in South Africa has always had to deal with major challenges such as the large numbers of learners in classrooms, inadequate learner support material, and poor-quality teaching especially in disadvantaged communities (Pillay, 2021). The COVID-19 pandemic and its destructive and disruptive impact on the physical, emotional, volitional well-being of people in general and children in particular has intensified many of the challenges already faced by school learners (Maree, 2022). Evidence suggests that the welfare of parents and caregivers in South Africa has been negatively impacted by school closures, with increased childcare responsibilities, pressure to assist with schoolwork and anxiety and fear of infection, all against the backdrop of economic stress and anxiety (Nwosu, 2021). Resource disparity at South African educational institutions has historical roots in the apartheid system, and the inequalities in educational outcomes between social and material resources at fee-paying and no-fee schools, and between wealthy learners and poorer learners were already stark prior to the advent of COVID-19 (Duby et al., 2022; Soundein et al., 2022). Those learners attending private schools, or well-resourced public schools, were able to migrate relatively smoothly to remote learning, due to their ability to access suitable devices and internet connectivity, as well as benefiting from support from teachers and parents (Le Grange, 2020).

Lack of access to online learning compounds pre-existing inequalities in the education system in South Africa, further entrenching the intergenerational cycle of poverty (Le Grange, 2020). Data shows that amongst South African learners in no-fee schools (accommodating upwards of 66% of the country's learners), one in five has access to a computer, compared to learners in fee-paying schools, of whom around half have a computer (Reddy et al., 2020; Timm, 2021). Consequentially, learners from under resourced schools are typically less able to benefit from online learning (World Bank, 2020). AGYW described how their schools also had restricted resources, and not all schools were able to offer remote learning to learners (Nel and Marais, 2020). Soundein et al. (2022) indicated that one school located in a rural area moved final-year learners in with their teachers to continue their studies and support during lockdown. As one learner stated, many were aware of the importance of education for

social mobility and the reduction of equity: “There are four people in each room, and we get lunch there after school”. It’s important because getting a good education - especially in South Africa; it sort of determines where you’re going in life” (Soundein et al., 2022). Disparity between government schools and private schools in South Africa was evident even before COVID-19, and the majority of schools in South Africa were insufficiently prepared and resourced for online teaching (Nel and Marais, 2020).

2.4 THREATS TO VIRTUAL LEARNING DURING LOCKDOWN

The COVID-19 pandemic has exposed inequalities in access to technology, such as between rich and poor, rural and urban, girls and boys, and across and within countries (UNICEF, 2020b). A study in Europe by Di Pietro et al. (2020) indicated that parents from less advantaged backgrounds are more likely to experience the stress of sharing a limited space and limited digital devices at home. Additionally, not all parents possess the digital skills required to help their children deal with the technical challenges of online learning. Learners from socio-economically disadvantaged households are often unable to afford e-learning technologies, both in terms of devices and data, necessary for remote learning (Chauke and Chinyakata, 2020). Learners using smartphones for online learning are at a disadvantage to those using computers, due to limited functionality, smaller screen size and keyboards and the lack of optimisation of online learning platforms for handheld mobile devices (Adnan and Anwar, 2020; Majanja, 2020). It is not only a lack of resources, technology, and internet infrastructure that disadvantages young people from socio-economically deprived communities, but also a lack of the basic digital and technological skills required to learn effectively from remote teaching resources (Adnan and Anwar, 2020; Oluka et al., 2021).

A study in India conducted by Nambiar (2020) revealed that lack of work satisfaction while taking online classes was reported by educators. Some of educators felt that their lack of computer skill came in the way of using the online teaching platform effectively (Nambiar, 2020). Lack of student interest and involvement was reported by a majority of teachers (Nambiar, 2020). Furthermore, educators reported that during online classes the main issue they faced was that students made a lot of excuses

about not being able to attend classes, for e.g., network issue, dysconnectivity, poor audio and video quality, etc. and it is difficult for them to know if they are giving genuine reasons or just escaping from attending the classes. Adolescents in Nairobi reported accessing some form of remote learning albeit with various challenges (Mwabe et al., 2021). Only one in five adolescents accessed learning materials via mobile phones, television and/or radio (Mwabe et al., 2021). About 97% of adolescents in Kenya reported that, despite attempting remote learning, they were faced with multiple challenges limiting the quality of their learning, including reduced time for learning due to household chores, child labour, and distractions in the home environment (Zulaika et al., 2021). In South Africa (SA) a sibling from rural areas attempting to assist younger brothers and sisters with schoolwork had to rely on what had been learnt at school due to lack of internet connectivity to access teachers' emails or online resources (Makute et al., 2020). Teachers in SA found it difficult to ensure coherent lessons due to limited interaction and could not find adequate teaching methods to cater for different learning abilities and struggled with evaluating learning (Makute et al., 2020; Daily Maverick, 2020).

According to Soundein et al. (2022) educators and learners were thrust, almost overnight, into an education mode with which few had experience. More advantaged schools and households were better able to sustain learning using online learning strategies, although this required effort and presented challenges for both teachers and parents (Daily Maverick, 2020; Soundein et al., 2022). Moreover, for this group of learners, schooling continued through online teaching or uploads of recorded lessons. Though online education may provide flexibility to learners and teachers, there are challenges involved that have the potential to exclude learners and constrain teachers; one challenge is recreating the dynamics of face-to-face instruction (Daily Maverick, 2020). Furthermore, the relationship between learners and their teachers is crucial for learner success because teachers facilitate how and why these learners engage with course content. Many disadvantaged schools did not have the means to facilitate satisfactory online learning (Parker and 2020; Spaul and Van der Berg, 2020; Fricker and Alhattab, 2021).

In poorer households, many children did not have a quiet workplace, desk, computer or parents who had time or capacity to take on the role of home scholars (Soundein et al., 2022). Access to technology and internet connectivity among South African learners is not equal, and therefore the majority of learners in the country, especially those from poor communities, in households where internet access is poor (or non-existent), who are already disadvantaged, have great difficulty accessing online learning (World Bank, 2020; Tomlinson et al., 2021; Soundein et al., 2022). Inequitable access to the internet, unreliable and limited connectivity, poor digital infrastructure and little access to devices suitable for learning have exacerbated and widened pre-existing social inequalities (UNESCO, 2021b). Reports suggest that South African educators found the home learning component of the curriculum difficult to manage and were highly dependent on the capacity of parents to engage, manage and assist with schoolwork (Hoadley, 2020). Another way in which social capital determines a differentiation in learning experiences at home is due to the fact that many parents and caregivers in South Africa in lower income households are not sufficiently educated to assist with homework (Reddy et al., 2020; Spaul and Van der Berg, 2020; Keevy et al., 2021).

COVID-19 has accelerated the adoption of remote learning in South Africa, but access to the internet nationwide is not universal, with socio-economically disadvantaged communities facing various barriers to accessing fast, reliable, and affordable internet solutions (Oluka et al., 2021). Whilst remote learning has ensured some level of continuity and reduced disruption to education, it is likely that the shift to online and internet-based learning has disproportionately impacted those learners from disadvantaged socioeconomic communities, particularly female learners (Oluka et al., 2021; Wernli et al., 2021). Spaul and Van der Berg (2020) based on a survey they conducted, revealed that, while 90% of South African households reported having access to a mobile phone, only 60% reported having access to the internet through their mobile phones. A survey of the members of the South African Democratic Teacher Union (SADTU) revealed that two-thirds of learners from poorer households had almost no communication from their teachers during school closures (Soundein et al., 2022).

During the time learners remained at home, it was estimated that 18% of all children in the school-going age group were in households without an adult caregiver during the day (Spaull and Van der Berg, 2020). Moreover, without teacher or adult supervision many African native language learners would not have had support in mastering the English lessons in which most of the lessons would have been delivered. This differentiation in social capital and resources meant a differentiated set of learning experiences at home (Spaull and Van der Berg, 2020). According to StatsSA (2022) an assessment of households' readiness for remote learning in 2020 revealed a disparity in access to various resources necessary to participate in remote learning. Most households did not have digital assets such as laptops and tablets at home that would allow learners to learn remotely using digital tools (Human Rights Watch, 2020; StatsSA, 2022). A noticeable urban-rural divide exists among these households in access to internet and phones (Human Rights Watch, 2020; StatsSA, 2022). Metropolitan households have greater connectivity from home compared to their rural counterparts (StatsSA, 2022).

While learners experienced learning losses during this unprecedented time because of the lack of access to educational inputs for three-quarters of learners, almost no learning took place for many children from poor backgrounds (Soundein et al., 2020). Teenage mothers living in rural areas are less likely to have resources such as access to internet, smartphones, and computers to adapt and implement measures needed to continue with virtual learning during school closures, including access to the internet (Human Rights Watch, 2020). In South Africa, in North-West and Limpopo provinces only 3,6% and 1.6% respectively have access to the internet at home (Hayratiyan, 2020).

2.5 MEASURES EMPLOYED TO MITIGATE THE CHALLENGES AND THREATS FACED IN TEACHING AND LEARNING DURING COVID-19 LOCKDOWN

Sustainable Development Goal (SDG) 4 highlights equity and inclusion as guiding principles and as objectives in themselves, assuming that “no education target should be considered met unless met by all” (ECLAC/UNESCO, 2020).

The policy intention of leaving no one behind and the commitment to reach the most disadvantaged groups runs throughout the 2030 Agenda and holds promise to bring the poorest and most marginalised groups to the forefront of political decision-making, in an exercise of justice and redress for their historical subordinate status (Vargas, 2019). In the context of the pandemic, this mandate to prioritise the most disadvantaged groups is unavoidable, mainly to ensure that the current conditions of inequality do not worsen (ECLAC/UNESCO, 2020). Given that inequality has been highlighted and exacerbated by the pandemic, policy options designed for education in the current context must recognise historical obligations to these groups in order to guarantee their right to education, both in terms of the availability of and access to learning opportunities, and the provision of quality and relevant education adapted to their conditions, needs and aspirations (Vargas, 2019; ECLAC/UNESCO, 2020). Online platforms have been the first to be rolled out to enable children to continue learning from home (UNICEF, 2020b). They are generally the most effective learning modality in getting some form of learning up and running (UNICEF, 2020b; UNESCO, 2020).

UNICEF came up with some plans for guidance on distance learning for the government and communities to ensure continuity of learning which includes the teachers continuing to be involved to guide their students as well as support parents during school closures (UNICEF, 2020b). The guidance included establishing a one-stop government portal with key resources which provided comprehensive one-stop guidance and information on the COVID-19 education response, and information regarding the different learning modalities being rolled out (UNICEF, 2020b; UNESCO, 2020). A number of the online courses for teachers have focused on building and improving digital skills in the context of online distance education (ECLAC/UNESCO, 2020). The most common virtual learning environments or platforms used in Finland distance teaching were Moodle, Ville, 3Teams, O365, Skype and Zoom, depending on the education provider (Lavonen and Samela-Aro, 2022). In Mexico, the Federal Ministry of Education deployed a national strategy for education continuity consisting of remote learning through television, complemented by access to digital platforms such as Google and local radio educational programming, with programmes of teacher

professional development on basic ICT skills to engage students remotely (Reimers, 2022). Other countries have also focused their training response for teachers on health care issues (ANEP, 2020). In Uruguay, the Training Department of the Human Resource Management Office of the Central Governing Council (CODICEN) of the National Public Education Administration (ANEP) has offered an online course to all teachers working in ANEP on health-related promotion and prevention issues (ANEP, 2020). Some countries have implemented immediate financial measures to support students and education systems in coping with the disruptions and economic impact of school and university closures (OECD, 2020). The package reduced the cost of taking short online courses, provided exemptions from loan fees for domestic students for a period of six months starting in May 2020 and guaranteed funding for domestic students, even if enrolments dropped (Schleicher, 2020). In May 2020 Italy announced new measures which seek to provide extra funding to cover costs arising from responses to the pandemic crisis at the school and university level (Schleicher, 2020). Additional financial resources were approved to recruit new teachers for primary and secondary level for the next school year (Schleicher, 2020).

In Saudi Arabia, teachers used creative approaches to implement new educational technologies to convey knowledge efficiently across six million students (Parveen, 2020). Saudi Arabian's government policy intends to facilitate improved schooling by remote learning approaches by starting a new commission to ensure that virtual schools work under the commission's distance learning approaches (Draycott, 2020). The schools in South Africa in all provinces put together plans on how they would deal with measures to support grade 12 learners including the extent of interventions other than classroom teaching (Nchabeleng, 2020; Soundein et al., 2022). The Department of Basic Education (DBE) has made efforts to support schools aside from normal classroom teaching through digital resources, worksheets, pace setters and radio broadcasts (Mbunge, 2020; Nchabeleng, 2020; Soundein et al., 2022). UNICEF assisted the DBE in the development of back-to-school Standard Operating Procedures (SOPs) (DBE, 2022). The first phase of TV and radio broadcasts concluded to coincide with school reopening (Nchabeleng, 2020).

Given the phased approach and need for continuous learning for grades still at home, the radio broadcasts continued through to September 2020 (UNICEF, 2020c). The Western Cape Education Department's (WCED) @home learning initiative brought together a wide range of non-profit organisations (NGOs), mostly in the area of literacy (Hoadley, 2020). Moreover, WCED has identified 887 schools with vulnerable students and aims to pair materials and support for additional learning in the home.

2.6 EVIDENCE OF SUCCESS IN IMPLEMENTING HOME-SCHOOLING AND ONLINE PLATFORM FOR CONTINUITY OF LEARNING

According to Greehow et al. (2020) digital communication seems to provide new opportunities for all pupils to be seen and heard. The pandemic has engaged researchers, administrators, and teachers in the development of digital pedagogy innovations (Greehow et al., 2020). Digi-pedagogy includes the knowledge and skills needed for using digital tools and platforms or digital environments for teaching and learning, as well as the knowledge and skills needed to support students' engagement, learning and well-being (Lanoven and Salmela-Aro, 2022). The rapid digitalisation process of instructional activities and the skills developed by teachers and students necessary to implement the "Learning at Home" programme allowed them to interact virtually (Lanoven and Salmela-Aro, 2022). This opened doors to diverse instructional practices, as some surveys administered to teachers across the country suggest (Baptista-Lucio et al., 2020). Parental involvement increased during home-school and most parents gained more knowledge regarding their children's learning. A study by Nambiar (2020) highlighted that education technology applications gained popularity amid the COVID-19 pandemic with classes and assignments using online channels.

Many online platforms offered free access to their services which have benefitted the education system (Parker and Alfaro, 2021). Furthermore, innovative platforms efficiently automate the creation of tailor-made content and provide a one-stop-shop for students and teachers. Following the lockdown in June 2020 the Norwegian government announced increased funding for schools to continue developing digital competencies among teachers and pupils (Bubb and Jones, 2020).

Bubb and Jones (2020) indicated that the local government and education administrators were able to play a constructive part and there was a high degree of digital literacy and good online infrastructure in the area because of enough resources. Additionally, many teachers planned creative activities that engaged pupils and thus established a good starting point for the New Norwegian national curriculum, which refers to the “joy of learning” created through the connection between creativity, learning and development of pupils. The mitigation measure most widely recognised by professionals in the education field was the implementation of educational television and radio programming, which was mentioned by school principals and teachers in three countries such as (Bahamas, Belize and Suriname), where the researchers conducted focus group research (Parker and Alfaro, 2021). A study in Libya revealed that teaching and learning in an electronic environment still provide many advantages, including, reducing expenses and promoting affordability (Maatuk el al., 2021). Virtual learning was also a successful alternative for many students to return to study in educational institutions during the spread of COVID-19, despite facing many issues and challenges (Maatuk el al., 2021). Furthermore, students believe that e-learning contributes to their learning based on the study findings.

While the most vulnerable students might not have access to digital learning resources, some governments and civil society organisations have provided these students with computers or tablets as well as internet access, or they organised teaching through television, phones or radio (OECD, 2020). A number of countries such as Portugal, Colombia, Australia and Chile offer useful insights into some of the most equitable and inclusive solutions to provide access to digital learning resources and effective distance education (OECD, 2020). In New Zealand, a new online learning space, hard copy learning packs and special television programmes have been offered to reach all learners (OECD, 2020). National and local educational systems with a technology focus established home learning and virtual learning environments quickly (Petrie et al., 2020). Moreover, those who already utilised digital learning platforms had fewer barriers to remote education compared with schools that had formerly made little use of technology or where pupils did not have devices and the internet at home.

Research in England concluded that schools which had already established a virtual learning environment had higher student engagement levels than those without, especially for disadvantaged children (Bubb and Jones, 2020). In Burkina Faso, a platform (Faso Education) was officially launched with digital educational content for teachers and learners from pre-school to secondary levels (Alcazar et al., 2020). In mitigating the disruption to learning, the Algerian Ministry of Education made available material on YouTube for students within K-12 sector (Fatureti, 2022). Some AGYW found ways of coping, remaining motivated and focused, demonstrating resourcefulness and creativity, in order to reduce disruption to their education and not fall behind (Duby et al., 2020). Some respondents described receiving assistance with studying from other people at home, such as parents or partners (Duby et al., 2020). Moreover, a few respondents also cited other sources of educational support and assistance including fellow students, teachers, online learning platforms, and volunteer-supported online programmes. Notably, those AGYW who sought remote help and academic support and accessed online resources had access to the internet, which facilitated their home studying (Duby et al., 2020).

During the coronavirus crisis, many countries have been using digital pedagogical tools and virtual exchanges between students and their teachers, and among students, to deliver education as schools closed (OECD, 2020). Countries have developed specific innovative policy initiatives such as providing equitable and inclusive access to digital learning resources and good learning conditions, ensuring that socio-emotional needs are being met (OECD, 2020). New educational policies and regulations in the South African Gazette 458776 of 6 February 2022 were put in place, which included the adjustment of the academic timetable, new teaching programmes and mode of delivery, catch up of the curriculum, health and safety measures as well as financial relief packages designed for the education sector (StatsSA, 2022). Well-resourced schools in South Africa have been able to adapt to teaching and learning through online platforms relatively effectively and efficiently; students at these schools are likely to be from more affluent families and have access to technology such as smartphones, tablets and personal computers connected to the internet (Pillay, 2021).

A study by Jantjies (2020) indicated that the Department of Basic Education (DBE) in South Africa (SA) created a COVID-19 guide for teachers addressing potential resources that they could use when teaching from home such as one-on-one consultations using platforms like Zoom, WhatsApp and Google messaging services that allow video calls to keep supporting learners. In recognition that internet access was not universal, and in an effort to continue the provision of education during school closures, the DBE made attempts to fill the gap for those learners unable to access online learning (Nel and Marias, 2020). The RSA Department of Communications and Digital Technologies (DCDT) collaborated with national television and radio broadcasters to launch the multi-media 'COVID-19 Learner Support program', with the aim of rolling out accessible virtual learning for students across South Africa (Mhlanga and Moloi, 2020; Ngogi-Emmanuel, 2020, UNICEF, 2020c). The DBE collaborated with several non-governmental entities on initiatives that made use of online, mobile and social media platforms, and proactive changes in national legislation required mobile providers to support "zero-rated" educational applications and websites (Czerniewicz et al., 2020; Mhlanga and Moloi, 2020; Landa et al., 2021). Teachers were tasked with creating lesson plans and assignments which were made available online through these platforms (Mhlanga and Moloi, 2020).

2.7 THEORETICAL FRAMEWORK

A theoretical framework is an abstract, logical structure of meaning that guides the development of a study and enables the researcher to link the findings to the body of knowledge in nursing (Polit and Beck, 2020). Bandura's Social Cognitive Theory (SCT) was used in this study as it assumes that learning occurs in a social context with a dynamic and reciprocal interaction between one's behaviour, personal factors, and environmental conditions (Lazaro, 2020). Social Cognitive Theory (SCT) started as the Social Learning Theory (SLT) in the 1960s by Albert Bandura which emphasises the importance of observing, modelling, and imitating the behaviour, attitudes, and emotional reactions of others (LaMorte, 2019). Albert Bandura was born on December 4, 1925, in Canada and he lived in America. Both his parents originally came from Poland and Ukraine, and both immigrated to Canada. He was a psychologist, and honorary professor in social psychology at Stanford University (Bandura, 2006b).

Albert Bandura next continued his studies at the University of Iowa in the United States where he obtained both his master's degree in psychology in 1951 and his Ph.D. in clinical psychology in 1952. After his graduation, Albert Bandura was offered work as a professor at Stanford University (Bandura, 2006b). He accepted the offer and became chairman of the Psychology Department in 1976 (Bandura, 2006b). Bandura published the ambitious Social Learning Theory (SLT) in 1977, a book that dramatically altered the direction psychology was to take in the 1980s (Bandura, 2006b). The extraordinary growth of interest in social learning and psychological modelling owes much to Bandura's theoretical analysis of this important phenomenon (Bandura, 2006b). SLT is able to explain much more complex social behaviour (such as gender roles and moral behaviour) than models of learning based on simple reinforcement (McLeod, 2016). Bandura developed a Social Cognitive Theory of Human Functioning by the mid-1980s (McLeod, 2016). This theory accords a central role to cognitive, vicarious, self-regulatory and self-reflective processes in human adaptation and change (Bandura, 2006b; McLeod, 2016). In this view, people are self-organising, proactive, self-reflecting and self-regulating not just reactive organisms shaped and shepherded by environmental forces or driven by concealed inner impulses (Bandura, 2006b; McLeod, 2016).

According to Bandura's SCT there are interactions between personal factors (e.g., cognitions, feelings, skills), behavioural factors (e.g., strategy use, help-seeking actions), and environmental factors (e.g., classrooms, homes), through the concept of triadic reciprocal causality all of which affect the individual's functioning (de la Fuente et al., 2022). In this model of triadic reciprocal causation, people are producers as well as products of their environment. Albert Bandura's book titled *Social Foundations of Thought and Action: A Social Cognitive Theory* provides the conceptual framework and analyses the large body of knowledge bearing on this theory (de la Fuente et al., 2022). A further distinctive feature of SCT which was developed by Bandura of this theory singled out for the special attention on the capacity for self-directedness and forethought on learners (Bandura, 2003). Bandura further indicated that people plan courses of action, anticipate their likely consequences, and set goals and challenges for themselves to motivate, guide and regulate their activities (Bandura, 2003).

SCT is one of the most robust theories which identified that people learn from their own experiences and by observing the experiences of others (LaMorte, 2019; Lazaro, 2020). The unique feature of SCT is the emphasis on social influence, and external and internal reinforcement (LaMorte, 2019). SCT considers the unique way in which individuals perform the behaviour (LaMorte, 2019). According to LaMorte (2019) the theory takes into account a person's past experiences, which factor into whether behavioural action will occur. These past experiences influence reinforcements and expectancies, which shape whether a person will engage in a specific behaviour and the reasons a person engages in that behaviour (LaMorte, 2019). SCT gives prominence to a self-system that enables individuals to exercise a measure of control over their thoughts, feelings, and actions (Lazaro, 2020). Lazaro (2020) highlighted that there are three major constructs in SCT that interact to influence behaviour which are personal factors (age, cognitions, previous experience with behaviour), environmental factors (access to resources, safety, support from family and friends), and aspects of the behaviour itself (vigor of the behaviour, outcomes achieved as a result of practicing the behaviour, competence with the behaviour) - see figure 2 below. Successful efforts to change behaviour depend on identification of the positive supports and the detractors in each of the three constructs (Lazaro, 2020).

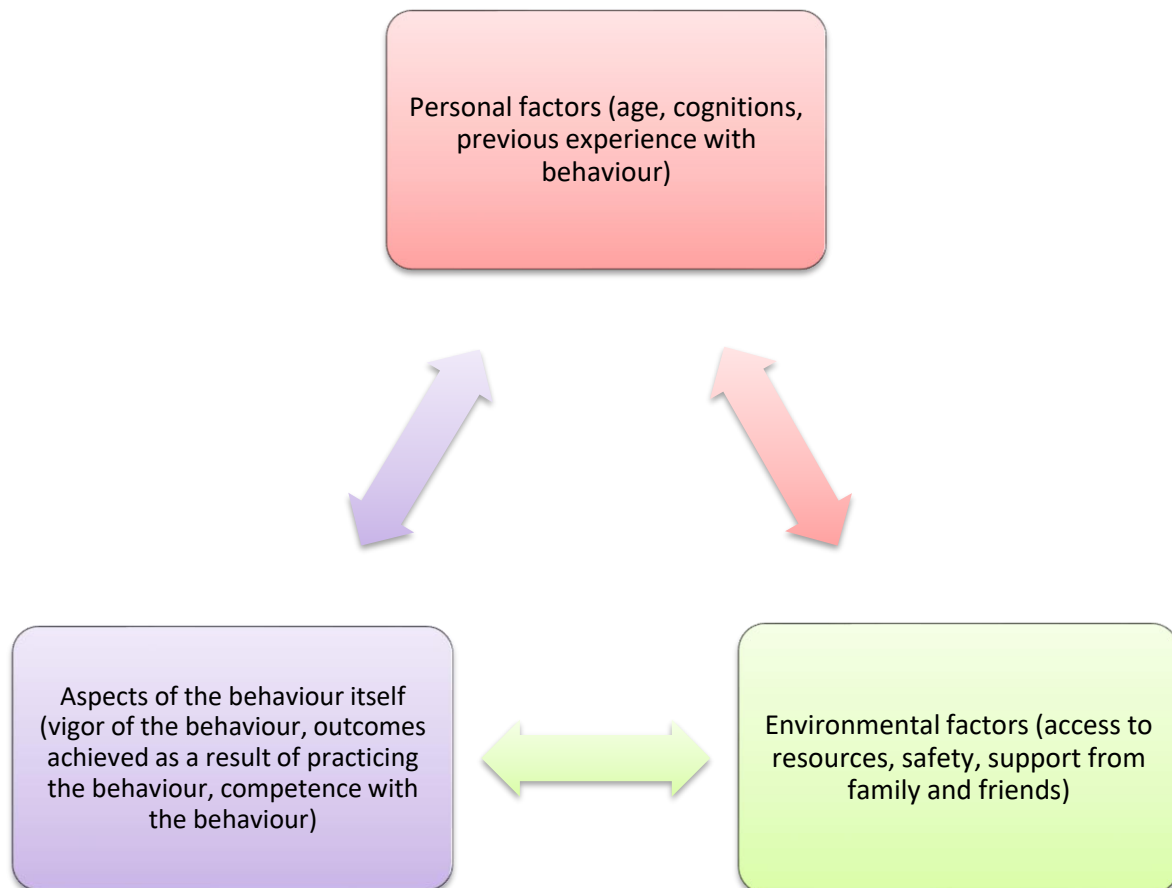


Figure 2: Three major constructs of Bandura's SCT that interact to influence behaviour (Lazaro, 2020)

The internal principle of SCLT sees people only as partial products of their environments (LaMorte, 2016). It is important that people create beneficial environments to exercise control over them (Bandura, 1997). People can influence what they become by selecting the environment carefully, and the choices they make are influenced by their beliefs and capabilities (Bandura, 1997). Figure 3 clearly shows the principles of triadic reciprocity which define human behaviour as triadic, dynamic, and reciprocal interaction of personal factors, behaviour, and the environment (Bandura, 2003). Self-efficacy, a concept introduced by Albert Bandura, which refer to an individual's belief in their capacity to execute behaviour necessary to produce specific performance outcomes (Lopez-Garrido, 2023).

Self-efficacy has been shown to predict the amount of effort an individual will expend to learn and practice behaviour, the persistence demonstrated in the process, and the effort expended to overcome the barriers (Lazaro, 2020). Environmental factors such as learning from home due to lockdown with the lack of internet and load shedding can result in inability to cope (behaviour) with their schoolwork for teenage mothers with low-self efficacy (personal factors). Teenage mothers who are intelligent and possess high self-efficacy skills can learn on their own from home without guidance and tend to cope and progress well academically. Self-efficacy in Bandura's theory introduced context of an explanatory model of human behaviour, in which self-efficacy causally influences expected outcomes of behaviour (Polit and Beck, 2022; Wong and Monaghan, 2020). Self-efficacy theory (SET) is a subset of Bandura's (1986) Social Cognitive Theory (Lopez-Garrido, 2023). According to this approach, the two key determinants of behaviour are perceived self-efficacy and outcome expectancies (Lazaro, 2020). The latter construct refers to the perceived positive and negative consequences of performing behaviour (Lazaro, 2020).

Perceived self-efficacy consists of personal belief of being able to face new situations, difficulties, and challenges (Bandura, 1997). This is an important self-regulation mechanism that plays a role in the self-management processes (Bandura et al., 2003). Goal setting and social support are two additional constructs in SCT that fall into the broad category of self-regulation, an important skill to develop when adopting new behaviour (Lazaro, 2020). The setting and achievement of goals can have a profound positive impact on learning new behaviour (Lazaro, 2020).

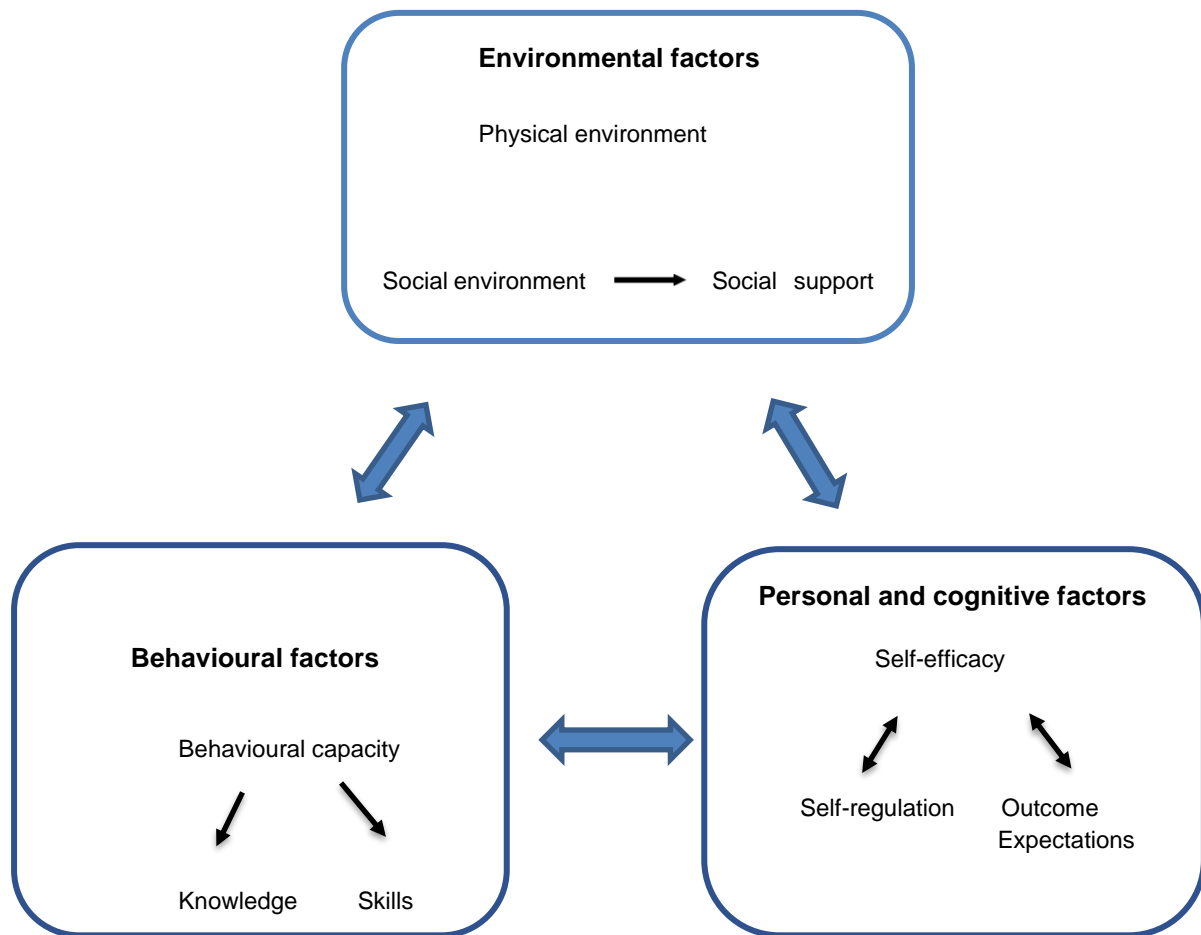


Figure 3: Bandura's model of Social Cognitive Theory (Research Gate)

Lazaro (2020) indicated that social support involves identifying others who will provide encouragement in the form of moral support, participation in behaviour and accountability. According to Lazaro (2020), social support has been shown to be significantly related to physical and mental health, pain, coping, and adjustment for certain populations. Self-regulation is a self-regulated behaviour that results in the fulfilment of one's constructed goals and standards (Ormrod, 2014). Learners with low self-efficacy are less likely to seek for assistance or to ask for help when they face challenges, where seeking for help is a self-regulation strategy (Ormrod, 2014). This means that teenage mothers with low self-efficacy may not ask for assistance or social support and may end up not coping with teaching and learning challenges.

Hayat et al. (2020) indicated that people with high efficacy are more likely to view difficult tasks as something to be mastered rather than something to be avoided while people with weak efficacy are more likely to avoid challenging tasks and finally focus on personal failings and negative outcomes. Teenage mothers with high self-efficacy have confidence in their own abilities to progress with schoolwork and tend to face stressful demands and challenges with confidence, despite the demands and changes brought by lockdown. This cheerful outlook makes the adoption of positive and effective coping strategies more likely. Bandura et al. (2003) highlighted that emotional self-efficacy reflects a person's abilities to manage negative emotions (anger, sadness, and fear) and to express positive ones (joy, enthusiasm, and pride); it plays a pivotal role in the management of different stressors and in influencing depression (Cattellino et al., 2021). Teenage mothers who possess positive emotional self-efficacy will be able to express positive emotions when coping with challenges brought about by the shift from classroom-based teaching to virtual learning. Self-efficacy theory (SET), and the broader SCT in which self-efficacy is encompassed, clearly endorses a democratic ideal that suggests that all individuals are competent and capable of being successful, provided they have the opportunities and self-efficacy necessary to pursue their goals (Hayat et al. (2020).

Teenage mothers will be competent, feel empowered and be successful in attaining their goals when provided with opportunities to continue with academic activities remotely during the pandemic. Furthermore, SET explicitly focuses on how individuals can be empowered with a sense of agency that will facilitate goal attainment (de la Fuente et al., 2022; Lopez-Garrido, 2023). Self-efficacy is best conceived as a differentiated set of beliefs specific to different areas of functioning (e.g., social self-efficacy, academic self-efficacy), and is therefore considered a domain-specific concept than a general self-concept as no person can feel competent at all tasks (Bandura, 1997). Across these different domains of functioning, self-efficacy beliefs influence the courses of action people choose to pursue, how much effort they put into given endeavours, how long they will persevere in the face of obstacles and failures, their resilience to adversity, whether their thought patterns are self-hindering or self-aiding, how much stress and depression they experience in coping with taxing

environmental demands and the level of accomplishments they realise (Lopez-Garrido, 2023). Self-efficacy beliefs not only involve the exercise of control over action but also the self-regulation of various personal determinants of learning, such as thought processes and motivation (Bandura, 1997). Teenage mothers who are good self-regulators do better academically than poor self-regulators even in the midst of environmental demands and challenges faced academically as a result of the pandemic and will use their own performances as a guide for assessing their self-efficacy (de la Fuente et al., 2022; Lopez-Garrido, 2023). According to de la Fuente et al. (2022) the use of self-regulatory skills increases a learner's feelings of efficacy about learning and performing well; this in turn leads to increased motivation, effort, persistence and learning. Students can set rewarding or punishing contingencies for themselves, such as delaying phone calls to their friends until their homework is completed (Trautner and Schwinger, 2020). Teenage mothers who set rewarding or punishing exigencies for themselves achieve better in school.

Self-regulated learners are distinguished by their reliance on systematic forms of self-observation to guide their efforts to self-control, as opposed to poorly regulated processes, such as discerning a computational error when solving problems related to subject content (de la Fuente et al., 2022). Academic self-efficacy has been defined as personal judgements of one's capabilities to organise and execute courses of action to attain designated types of educational performances (Basith et al., 2020). Teenage mothers who are able to identify their strengths and weaknesses are capable to organise and execute courses of action designated types of educational personal performances. Academic self-efficacy has been reported to promote academic achievement directly and indirectly by increasing academic aspirations and prosocial behaviour (Bandura, 1997; Basith et al., 2020). Hayat et al. (2020) revealed that young people who believe in their educational performance achieve higher results academically than their counterparts who have less efficacious belief in their academic pursuits. Teenage mothers with high self-regulatory and academic self-efficacies are more likely to experience academic success in remote learning (Basith et al., 2020).

2.8 CHAPTER SUMMARY

In this chapter the literature review related to the topic of interest in the study was discussed. The theoretical framework underpinning the research was discussed and applied in this chapter. The following chapter presents the research design and research methods in depth.

CHAPTER 3: RESEARCH DESIGN AND METHODS

3.1 INTRODUCTION

This chapter presents the research design and methods, the research paradigm grounding the study, philosophical perspectives, data generation methods and instrument, and data analysis methods, while trustworthiness and ethical principles adhered to will also be discussed. According to Fouché et al. (2021) methodology is a philosophical and scientifically informed way to solve the research problem systematically. It is a framework that informs all designs, methods and techniques that will be used in conducting research from start to finish (Fouché et al., 2021). Research methodology is the science of studying how research is to be carried out and which systematic methods are to be followed to solve the proposed research problem (Fouché et al., 2021).

3.2. RESEARCH DESIGN

Research design provides a blueprint for maximising control over factors that could interfere with the study's desired outcome (Gray and Grove, 2021). According to Gray and Grove (2019) research design is a general plan of a study, selected to answer a specific research question. The study adopted qualitative, critical participatory action research (PAR) through the community engagement approach. PAR is a qualitative research methodology that involves researchers and participants collaborating to understand social issues and take actions to bring about social change (Laher et al., 2019; Vaughn and Jacquez, 2020). Art research is a hermeneutical or interpretive approach concerned with the study of human actions and social practice (Williamson and Johanson, 2018). According to Polit and Beck (2022) the aim of PAR is to produce not only knowledge but also action and consciousness-raising. Furthermore, PAR is aimed to help people recover and release themselves from constraints of irrational, unproductive, unjust, and unsatisfying social structures that limit their self-development and self-determination (Williamson and Johanson, 2018). The PAR tradition has as its starting point a concern for the powerless of the group under study (Polit and Beck, 2022; Chevalier and Buckles, 2019).

Community-based participatory research is an approach which engages multiple stakeholders including the public and community providers who affect and are affected by a problem of concern and aims to combine knowledge with taking actions, including social change, to improve health (Creswell and Clark, 2018; Flick, 2020; Schmalenbach, 2018; Lobiondo-Wood and Haber, 2022). Arts-based research involves adapting the tenets of the creative arts such as photographs, drawings, scrapbooks, storytelling and poetry in a social research project (Leavy, 2022; Polit and Beck, 2022; Abma et al., 2019). Researchers in art-based research aim to address social research questions in holistic and engaged ways in which theory and practice are intertwined (Leavy, 2022). The critical participatory action research was chosen based on its tenets to promote and improve social justice, to create social change, and to work for the benefit of teenage mothers (Kemmis et al., 2014; Leavy, 2022). Leavy (2022) indicated that action research requires a major shift in attitudes and behaviour related power. Moreover, the pursuit of emancipation, liberation, partnership and participation; the fight for social justice; social awareness and equity are important considerations.

The emphasis in PAR is on the involvement of all key role players (Fouché et al., 2021). This approach is committed to social justice and equity, especially in powerless and disenfranchised communities (Fouché et al., 2021). Furthermore, PAR empowers members of the partnering community and provides all with access to information and explicitly seeks to bring together groups of people who can combine their perspectives, resources, skills and ideas to create solutions (Fouché et al., 2021). The PAR approach use research to allow people to be involved in all aspects of a project while they start to take control of their own lives (Abma et al., 2019; Chevalier and Buckles, 2019; Fouché et al., 2021). PAR is concerned with the democratisation of knowledge development as a component of social justice (Leibenberg, 2018; Abma et al., 2019; Chevalier and Buckles, 2019). It does this by ensuring that community members are involved throughout the research process to produce data that is authentic to community experience and action (Leibenberg, 2018; Abma et al., 2019; Chevalier and Buckles, 2019). Consequently, this approach seeks to incorporate community realities, needs and expertise into knowledge making.

PAR is concerned with reconnecting science with society for the purposes of social transformation where action and research converge to inform theory in ways that effectively support community advocacy for change (Leibenberg, 2018; Abma et al., 2019; Chevalier and Buckles, 2019). Such change is brought about largely through integrated knowledge translation and mobilisation, where knowledge has emerged from critical pedagogy and citizens' science (Leibenberg, 2018). There are four essential elements to PAR: participation, action, research, and social change for social justice (See figure 4). These elements are woven together in the following way: Participation by stakeholders in a process aimed at the advancement of knowledge through a systematic research process which results in action for social change on the part of the stakeholders (Leinbenberg, 2018). It is specifically the interaction of research and action that is intended to result in social change (Leinbenberg, 2018; Chevalier and Buckles, 2019).

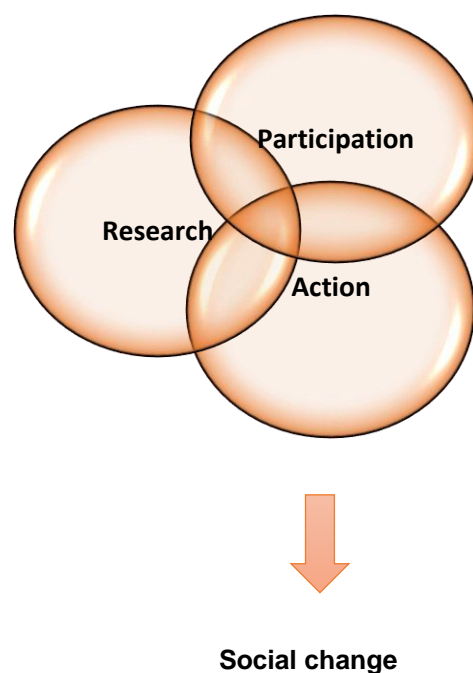


Figure 4: Essential elements of PAR (Research Gate; Chevalier and Buckles, 2019)

The researcher and participants, together as equal partners, investigate the problem and its underlying causes and members of the population are able to influence the resultant social action stemming from the newly gained power (Abma et al., 2019;

Chevalier and Buckles, 2019; Fouché et al., 2021). Community participation provides a sense of belonging, a commitment to common goals, a willingness to assume responsibility for oneself and others, as well as readiness to share, interact and solve problems together (Abma et al., 2019; Chevalier and Buckles, 2019; Fouché et al., 2021). Action research emphasises inclusion, participation and voice in the social practices that involve and affect participants (Kemmis et al., 2014). Furthermore, the teenage mothers will be active in making informed decisions throughout all aspects of the research process for the primary purpose of imparting contextual transformation and capacity development. The approach enhanced social inclusion and democracy, addressing inequalities and redressing marginalisation of those teenage mothers by having an opportunity to express themselves and encourage their voices to be heard (Leavy, 2022; Abma et al., 2019; Chevalier and Buckles, 2019).

3.3 RESEARCH PARADIGM

A paradigm is a worldview, a general perspective on the complexities of the world (Polit and Beck, 2020). A paradigm is a set of beliefs or interrelated assumptions about the social world which provides a philosophical and conceptual framework for the systematic study of that world and guides action (Denzin and Lincoln, 2018; Williamson and Johanson, 2018; Laher, 2019; Mertens, 2020). According to Fouché et al. (2021) a paradigm is a pattern containing a set of legitimated assumptions and a design for collecting and interpreting data. Moreover, a paradigm guides how a person interprets material about reality and guides the consequent action to be taken. Polit and Beck (2020) indicated that paradigms for human inquiry are often characterised in terms of the ways in which they respond to basic philosophical questions such as “What is the nature of reality?” and “What is the relationship between the inquirer and those being studied. This study is grounded in a transformative paradigm which is rooted in the recognition that injustice and inequality are pervasive and the belief that research and evaluation are important tools for addressing these societal ills (Frey, 2018). The transformative paradigm provides a philosophical framework that explicitly addresses issues of power and justice and builds on a rich base of PAR (Mertens, 2020).

Strengths of transformative designs include the action-oriented nature of the research, empowering communities to action change, and the participatory nature of the involvement of participants in the research (McBride et al., 2020). The transformative paradigm is a research framework that centres the experiences of marginalised communities, includes analysis of power differentials that have led to marginalisation, and links research findings to actions intended to mitigate disparities (Jackson et al., 2018). The transformative paradigm is appropriate for studies that are based on social and emancipatory philosophy, approach and research design (Omodan, 2020). The basic tenet of this transformative framework is that knowledge is not neutral, and it reflects the power and social relationships within society (Creswell and Creswell, 2020). Thus, the purpose of knowledge construction is to aid people to improve society (Creswell and Creswell, 2020). Furthermore, this paradigm also falls within the purview of participatory action researchers, with a focus on the dynamics of emancipation. This paradigm maintains that research and evaluation can and should play an explicit role in identifying and alleviating discrimination and marginalisation based on factors such as race, ethnicity, religion, gender, sexual orientation, socioeconomic status, age, and disability (Lahey et al., 2019).

Researchers and evaluators operating within this paradigm examine power dynamics and systems that privilege certain groups over others (Frey, 2018; Jackson et al., 2018). Transformative approaches extend beyond knowledge generation and take an activist stance in promoting social justice (Frey, 2018; Romm, 2020). Furthermore, the transformative paradigm views knowledge as a social construction shaped by the knower's individual experiences, personal characteristics, and community affiliations. As a result, researchers and evaluators as well as study participants are called to reflect on their own beliefs, consider how beliefs are shaped by one's identity and life experiences, and critically examine how such beliefs may influence one's perspectives on the study topic and methods (Frey, 2018). Consequently, transformative researchers and evaluators encourage traditionally marginalised groups to play a central role throughout the study process to ensure the findings are inclusive and represent the perspectives of all relevant groups (Frey, 2018; Romm, 2020).

The research participants reflect on their qualities and move toward self-discovery, as they dream and envision the best that they could be, dialogue on strategies to implement their dreams and draw a plan to take them to their destiny (Romm, 2020). This paradigm aims to give voice to local knowledge held by a diverse array of participants (Frey, 2018; Omodan, 2020). Frey (2018) highlighted that particular attention is paid to the members of marginalised groups traditionally excluded from research and evaluation efforts or viewed merely as study “subjects”. Furthermore, within the transformative paradigm, members of marginalised groups are seen as having their own individual and community strengths and legitimate knowledge systems.

3.3.1 Philosophical perspectives

All researchers have philosophical perspectives that guide the topics they study and their choices about methodology (Creswell and Clark, 2018). The philosophical perspectives of researchers are the worldviews that guide their research decisions (Gray and Grove, 2021). There are a number of ways in which paradigms can be conceptualised but the most influential has been the epistemological stances (Barnes, 2018). These have historically asked four main questions of every paradigm: What is the nature of the social world (ontology)? What is the relationship between the researcher and the social world (epistemology)? What are the best ways to obtain information about the social world (methodology)? How do researchers’ values, worldviews and ethics contribute to their research (axiology) (Lincoln, Lynham and Guba, 2011; Mertens and Wilson, 2019; Mertens, 2020a).

3.3.1.1 Axiology of transformative paradigm

Axiology is a philosophical branch or an assumption of paradigm which addresses issues of ethics to be considered when planning research (Denzin and Lincoln, 2018; Laher et al., 2019; Omodan, 2020; Fouché et al., 2021). Axiology promotes moral, cultural respect, social justice and human rights and equally addresses inequities and reciprocity (Omodan, 2020). This is to say that the axiology of transformative paradigm defines and respects what is right and what is wrong in the conduct of research. According to Gray and Grove (2021) axiology is the value structure of a person.

A researcher's axiology is based on answers to questions such as "What is right?" and "What is the value of a person?". The axiological assumptions that encompass the values and ethics held by researchers occupy a dominant position because they guide and give direction to the other assumptions (Mertens, 2021). According to Omodan (2020), it borders on what particular values needed for every process of research, including participants' treatment, the data and the targeted audience of the research. The transformative axiological assumption includes the importance of respecting cultural histories and norms in interactions in order to conduct research that has the potential to increase social justice (Laher et al., 2019; Mertens, 2020; Omodan, 2020). Over and above, it lays fundamental emphasis on the ethical responsibilities of researchers to understand and respect humanity and its diversities in order to challenge societal coloniality and/or inequality that perpetuates oppressive ways of doing. Thus, the assumption of axiology in the transformative paradigm is on the fundamentality of the participants' values that must be respected with almost recognition to humanity and diversity for the purpose of emancipation (Omodan, 2020).

The social justice theory of ethics takes the rights-based theory to the societal level, leading to an awareness of the need to redress inequalities by giving precedence, or at least equal weight, to the voices of the least advantaged groups in society (Mertens, 2020b). Moreover, the implicit goal is the inclusion of those who may not have sufficient power for the accurate representation of their viewpoints in these regard teenage mothers are focal point. The social justice theory of ethics also empowers the less advantaged in terms of being able to take an active role in social change. Therefore, in this study, the teenage mothers' rights and welfare were considered, and this led to greater involvement in the research process which is one of the tenets of the transformative paradigm (Mertens, 2020a). The transformative axiological assumption includes the need to recognise the strengths of the community members and integrate their knowledge, skills and experiences into the planning and implementation of the research (Mertens, 2021).

The future generation can use the lived experiences of these teenage mothers to improve their future lives in developing self-control, self-efficacy and self-regulatory skills, thus preventing teenage pregnancy. Teenage mothers as marginalised and vulnerable group are viewed as being “at risk”, a problem, weak, powerless, or deviant in the communities where they grew up (Mertens, 2020a; Mertens, 2021). The stigma they acquire as teenage mothers transcends with them into adulthood. Research that critically examines the historical and structural inequalities that subdue members of marginalised communities increases the probability that the impact of that research will leave communities affluent (Mertens, 2020a; Mertens, 2020b; Omodan, 2020).

3.3.1.2 Ontology of transformative paradigm

Ontology is defined as the study of the nature of being and existence (Gray and Grove, 2021; Fouché et al., 2021). Ontology from general perspectives is referred to as the view of reality and being (Omodan, 2020; Tenny et al., 2022). It addresses questions such as “What does it mean to exist?” and “What is real?” (Bracanti, 2018; Creswell and Clark, 2018). The qualitative researcher’s ontology includes the reality of humans and existence being holistic and embedded in an environment that cannot be divided into pieces (Gray and Grove, 2021). Furthermore, ontology is an assumption made about the nature of social reality, such as what exists, how and why. The ontology of the transformative paradigm is built from historical realism, where there is a belief that reality exists outside the mind (Omodan, 2020; Mertens, 2020). The reality, according to this ontological assumption, is shaped historically, socially, culturally, and ethnically (Omodan, 2020; Mertens, 2020). Transformative ontological belief emphasises that what appears “real” may instead be reified structures that are taken to be real because of historical situations (Mertens, 2020). Since the reality is constructed based on sociality, the researcher needs to critically examine the issue of sociality, power and politics in the quest for reality (Omodan, 2020). This is to say that the experiences of the community of researchers and/or the participants are fundamental in the transformational process of inquiring a particular phenomenal reality that is visible.

3.3.1.3 Epistemology of transformative paradigm

Epistemology is the study of knowledge with questions such as “What is knowledge?” or “How is knowledge produced?” or “How can I know what is real?” (Gray and Grove, 2021; Fouché et al., 2021; Tenny et al., 2022). The transformative paradigm’s epistemological assumption centres on the meaning of knowledge as it is defined from a prism of cultural lenses and the power issues involved in the determination of what is considered legitimate knowledge (Mertens, 2020; Omodan, 2020). In the transformative paradigm, the issue of relationship and trust in the process of knowledge generation is essential because it seeks to understand versions of reality and power issues (Omodan, 2020). The establishment of interactive relationship is needed to be able to understand and deal with power differentials within community members (Laher et al., 2019; Mertens, 2020; Omodan, 2020). Therefore, this assumption is on the quest for what is the truth and maintains that knowledge is true, which must be turned into actual practice in order to transform and/or empower people (Mertens, 2020; Omodan, 2020).

3.3.1.4 Transformative methodological assumption

Methodologically, the transformative paradigm not only leads researchers to reframe the understanding of worldviews but also to understand that subsequent methodological decisions need to be reframed as well (Mertens and Wilson, 2019; Mertens, 2020a). The cyclical model of research is situated in the dynamic hands of community participation that allows for community participation in the inquiry process at all levels (Mertens, 2020a). Participatory action research is an approach that is potentially commensurate with culturally competent, transformative methodologies (Mertens, 2020). Furthermore, participatory methods in and of themselves are not sufficient to warrant the label of transformative work. Participatory inquiries can be framed in either a practical or a transformative way (Mertens, 2020). In the methodological assumption of transformative paradigm, the purpose of research is to destroy the myth, illusions, and false knowledge and empower people to act and transform their own society indigenously. This assumption promotes participants’ recognition in the process of addressing human and social issues (Omodan, 2020).

This makes researchers and the researched assume the position of being recognised as co-researchers (Moleko, 2018). Furthermore, the assumption enables them to work together and address the issue at stake without power supremacy. The common designs in the methodological assumption of this paradigm are usually the participatory rural appraisal approach and action research (Dube, 2016; Moleko, 2018). The participants are involved in the process of identification and definition of a problem, data generation and analysis, recommendation of findings and also engaged in the practices of the findings in such an approach to research (MacDonald, 2012). The stance of methodological assumptions of the transformative paradigm could be smoothly implemented with some research design, such as participatory action research (PAR) among others (Omodan, 2020). The researcher concentrated on PAR because it empowers people by involving them in the planning, implementation and in communicating the research findings (Omodan, 2020; Mertens, 2021).

3.4 RESEARCH METHODS

Research methods are the techniques researchers use to structure a study within the chosen design (Polit and Beck, 2020; Gray and Grove, 2021). According to Mishra and Alok (2019) research methods include all the techniques and methods which have been used for conducting research.

3.4.1 Research setting

Research setting is the location in which a study is conducted (Gray and Grove, 2021). According to Polit and Beck (2020) research setting is the physical location and conditions under which data collection takes place in the study. This study was conducted in the Makhado Municipality, Vhembe district, Limpopo Province (Makhado). The researcher decided to conduct the study in Limpopo Province because it is known to be the poorest, with high teenage pregnancy and HIV incidences (Statistics South Africa, 2019). In Limpopo 45 percent of the population is living in poverty (Makhado IDP, 2019/20). It is of paramount importance that teenage mothers' potential to improve their contribution to the wider economy of the families and the country is unleashed and propelled in the right direction. Vhembe district is one of the districts in Limpopo Province and it has four local municipalities that are

Musina, Mutale, Thulamela, and Makhado (Makhado IDP, 2019/20). The Makhado Integrated Development Plan (IDP) review (2019/20) recorded the population of the municipality of children (0-14) at 141 373, youth (15-34) 15 239, adults (35-64) 89 158 and the elderly 65 and above at 32 957. Makhado's overall unemployment rate is 36.7% of which 49.6% are youth and the main contributing factors to unemployment are the relatively low education levels and the lack of access to opportunity. In general, the level of education in the region is low which makes 67.8% of households (Makhado IDP, 2019/20). According to Makhado IDP (2019/20) there is relatively low education among adults at 12.8% with the majority with no schooling, and 25.6% of adults are schooled up to grade 12. The Vhembe district, in which Makhado Municipality is located, has 10% coverage of network in the area, thus affecting learning from home (Makhado IDP, 2019/20). The number of households in Makhado Municipality that have access to free basic electricity is 28 212, and 255 282 receive social grants (Makhado IDP, 2019/20). According to StatsSA census 2011, 372 557 people earn between R1 and R800. This means that the majority are unable to pay electricity and cannot afford access to the internet and purchase of computers and smartphones for online learning (Makhado IDP, 2019/20).

3.4.2 Study population

Population consists of an entire group of people or type of element that represents the focus of the research (Gray and Grove, 2021; Polit and Beck, 2020). According to Lobiondo-Wood and Haber (2022), population is a set that has certain characteristics and are either clearly defined or implied in the research question. The population of the study consists of the teenage mothers in the rural village of Makhado Municipality. According StatsSA (2019) 1 765 555 learners were enrolled in Limpopo Province. The Department of Basic Education's (DBE) Annual School Survey data reported an estimated 15 504 pregnant learners within the schools. The General Household Survey (2015) data reflected that Limpopo had highest 21 615, KwaZulu-Natal 18 347, Eastern Cape 14 980, Gauteng Province 10 045 and Northern Cape lowest at 1 311 (StatsSA, 2017). The same survey indicated that only a third of girls stay in school during their pregnancy and following childbirth. The DBE reported that 16% of women aged 16-19 in South Africa have begun childbearing (StatsSA, 2017).

More specifically, the DBE Statistics (2018) reported that Limpopo Province had 637 490 female learners in secondary schools. The most shocking revelation was the statistics of over 600 child mothers between the ages of 10 and 13 registering, 499 of whom gave birth in 2020 (StatsSA, 2021). In this study, the population was all teenage mothers enrolled for schooling in the 2020 and 2021 academic years.

3.4.3 Sampling

Purposive sampling means the researcher selects individuals and sites for a study because they can purposefully inform an understanding of the research problem and central phenomenon in the study (Creswell and Creswell, 2020; Fouché et al., 2021). Purposive sampling was chosen because it is based on the premise that seeking out the best cases for study produces the best data, and research results are a direct result of the case sampled (Leavy, 2022). The researcher employed purposive sampling whereby volunteer informants were supplemented with new participants through snowballing by asking early informants to refer other study participants (Gray and Grove, 2021; Fouché et al., 2021). Sample is a subset of a population comprising those selected to participate in a study (Gray and Grove, 2021). This was to ensure that the principles of PAR design and community engagement, such as social justice, social inclusion, addressing inequality, redressing marginalisation and sharing of research powers with participants are adhered to (Abma, Cook et al., 2019; Chevalier and Buckles, 2019).

A total sample of at least 11 teenage mothers from Makhado was approached to participate in the study. According to Leavy (2022) the sample is regarded as suitable since this is qualitative study where richness and depth of data are important to achieve research quality rather than quantity.

3.4.4 Recruitment of participants

The community leaders of Makhado village were approached for permission to conduct the study. A community meeting was held with the help of the community leader to explain about the study and its purpose to the chief. Gatekeepers are people who can provide access to the culture, facilitate the collection of data, and increase

the legitimacy of the researcher (Creswell and Creswell, 2020). The permission to conduct the study was granted from the tribal office by the chief of the village under the study. The ways used by the research assistant from the community to recruit participants was placing of flyers inviting prospective participants in spaza shops, posting on Facebook and a WhatsApp group and snowballing. It began with two participants on the first of data generation. The supporters, parents, and church members came forward to assist in recruitment. Furthermore, the parents of the prospective participants were approached by the research assistant for permission to conduct the study. The researcher requested assent in the case where the teenage mothers were minors. The researcher explained the study aims and objectives to the teenage mothers so they could make an informed decision to participate.

3.5 DATA GENERATION METHODS AND INSTRUMENT

Data collection is a series of interrelated activities aimed at gathering good information to answer emerging research questions (Creswell and Clark, 2018). According to Gray and Grove (2021) data collection is the process of selecting subjects and gathering data from them. Data generation ran from October 2022 to February 2023. Semi-structured, face-to-face interviews and participatory arts-based methods were used to generate data (Leavy, 2022), with each consenting participant as the researcher was seeking to explore and describe the experiences and coping strategies used by the participants in teaching and learning during lockdown (Creswell and Clark, 2018). The details are given below. The interview sessions were conducted in Tshivenda and English. The researcher utilised the following techniques to generate data carefully: semi-structured interviews were conducted with 11 participants which were audio recorded, narratives were also used for participants to tell their stories in detail, and participatory arts were used for participants with lack of verbal or mental capacity to participate in an interview, that is, participants were allowed to draw pictures that represented how they felt or their responses to a question (Gray and Grove, 2021; Bergbom and Lepp, 2022). Additionally, the researcher employed participatory arts to explore challenges and coping strategies as expressed by participants. The main technique was to listen and observe intently and encourage the speaker with minimal verbal and non-committal responses.

Triangulation involves using multiple methods of data collection to increase the likelihood of getting reliable and accurate results (Tenny et al., 2022). The researcher used interviews, field notes, drawings, and narratives to yield thick and rich data. Research instruments and methods included visual arts such as drawings, the use of scrapbooks, and field notes to generate data. Critical reflective sessions were used to gain understanding of the coping strategies and learning support systems experienced during the lockdown in South Africa. Tshivenda and English were the mediums of communication during the interview as determined by their language preferences.

3.5.1 Semi-structured interview

A semi-structured interview is an interview in which the researcher has a list of topics to cover rather than specific questions to ask (Polit and Beck, 2020). Semi-structured interviews are rich sources of data because they are flexible; the researcher is free to improvise or alter the wording of a prompt based on how the participant responded to a previous question (Brancati, 2018). This type of interview was chosen because it facilitates the collection of rich and thick descriptions and the detailed exploration of topics from a smaller sample; participants are actively involved and provide direction to the interview, and the researcher is able to follow up on both verbal and non-verbal communication (Fouché et al., 2021). This type of interview allowed flexibility and made it possible to follow intent and thoughts of the participants and direction of the interview by the researcher was minimal (Gray and Grove, 2021). The main technique was to listen and observe intently and encourage the speaker with minimal verbal and non-committal responses. Interviews were audio-taped and continued until data saturation occurred. An interview guide with predetermined questions with probing was used in conducting interviews (Fouché et al., 2021). The data generation instrument was not piloted.

The researcher opened the discussion with a question “*Please share with me your learning experiences during the COVID-19 lockdown period in SA*”. Semi-structured interviews with participants lasted between 30 and 45 minutes. Interviews were audio-taped and continued until data saturation occurred.

Participants were asked additional questions via probes to better understand their experiences and coping strategies, depending on their responses. According to Creswell and Clark (2018) interviews are considered to be social interaction based on a conversation. It is where “knowledge is constructed in the interaction between the interviewer and the interviewee”.

3.5.2 Field notes

Field notes refer to the notes of the researcher during and after observations (Leavy, 2022). According to Polit and Beck (2022) field notes represent the participant observer’s efforts to record information and also to synthesise and understand data. The researcher while observing during the interviews jotted down key words, entering phrases on a document and audio-recording things to remember on the recording device (Gray and Grove, 2021). The researcher made field notes of observations made (verbal and nonverbal cues) and these notes contributed to the richness of the data collected (Polit and Beck, 2022; Gray and Grove, 2021). Field notes allowed the researcher to follow up with any general impressions of the environment and the participants (Lobiondo-Wood and Haber, 2022). The researcher typed the cues and organised them with each observation dated. Field notes identify the people in a situation, environmental factors, and actions taken by those in the situation (Gray and Grove, 2019).

3.5.3 Probing

Probing is the act of posing secondary questions during a qualitative interview so that the researcher can elicit contextual detail, clarification, and additional information (Polit and Beck, 2020; Gray and Grove, 2021). Researchers use probing to obtain more information in a specific area of the interview. The researcher uses probing by asking thoughtful questions to gain additional insights into what the participant is sharing (Gray and Grove, 2021). Gray and Grove (2021) highlighted that some participants may give short answers, so the researcher may have to encourage them to elaborate. The researcher asked the participants to explain their meaning of the pictures drawn and further asked questions where more information and clarification were needed.

3.5.4 Participatory arts

The researcher employed a participatory arts-based method to explore challenges and coping strategies as expressed by the participants (Leavy, 2022). Visual media form a central part of telling others' stories and interpreting others' experiences (Fouché et al., 2021). Visual images can be used to promote communication and facilitate the relationship between the participant and the researcher (Gray and Grove, 2021). Some potential participants lack verbal or mental capacity to participate in a traditional interview but may be able to select or draw pictures that represent how they feel or their responses to a question (Gray and Grove, 2021; Bergbom and Lepp, 2022). Drawings allow revisiting situations, and they supplement the audio-to-text act of transcribing (Jellema et al., 2020). Furthermore, drawings play a significant role in arranging and re-arranging concepts when formulating conclusions. Drawn pictures may facilitate and support reflection related to the deepening of experiences and thoughts and communicate and express more than words can do (Bergbom and Lepp, 2022). The researcher requested participants who could not express themselves well in an interview to draw pictures to be able to tell their stories on paper.

Participants in this study drew pictures to tell their stories, and any other cultural artefacts to be able speak up, express themselves and be experienced as a person and have their expression valued by others, and reflect on their condition during the lockdown in SA (Abma et al., 2019; Chevalier and Buckles, 2019). A picture is often worth a thousand words and can be confirmed by an accompanying description of the situation - looking at a picture and discussing it with a participant can yield valuable information about the participant and his family or whatever is the focus of the discussion (Fouché et al., 2021).

3.6 DATA ANALYSIS

The researcher employed qualitative data analysis by transcribing text from interviews and observations into word processing files for analysis (Creswell and Clark, 2018). Data analysis started immediately after the first interview with the participant. The researcher identified themes and categories as the analysis and interpretation

progressed which were used to build a rich description of the phenomenon (Creswell and Clark, 2018). Constant comparison of the data was done across the dataset both within and between the transcripts in order to integrate the themes, categories and sub-categories that were identified during the analysis (Creswell and Creswell, 2022). Coding was done by grouping evidence and labelling ideas so that they reflect increasingly broader perspectives (Gray and Grove, 2021). The researcher began with identifying patterns that may be abstract overarching ideas and concepts while analysing and coding the data (Gray and Grove, 2021). Data was analysed using qualitative thematic analysis methods and involved coding each line of the text. Field notes jotted down by the researcher and scrapbooks of participants' narratives were also transcribed and themes emerged. The data generated from the audio-taped individual interviews with the participants was transcribed verbatim (word-for-word) and then verified by the researcher and participants. Data included verbatim transcripts translated into English, observations documented in field notes, visual figures such as drawings and narratives.

Data analysis was concurrently done after each interview with the participant. Each transcribed text from interviews with the participants was read repeatedly by the researcher to ensure that the researcher got the essence of the entire transcript. An experienced independent coder was consulted for data co-coding to ensure confirmation of the results. The research setting, methods and instruments were detailed for replication (Creswell and Creswell, 2022). According to PAR, participants are involved throughout in the research process for the primary purpose of imparting contextual transformation and capacity building. Participants' involvement warranted the provision of a sense of belonging for teenage mothers giving them an opportunity to become active in informed decision making and develop willingness to assume responsibility for oneself and others as well as readiness to share, interact and solve problems together (Abma et al., 2019; Chevalier and Buckles, 2019). Thematic analysis was used to analyse the transcribed texts and participatory arts, intended at identifying main and sub-themes. The researcher identified themes and sub-themes, as the analysis and interpretation progressed which were to build a rich description of the phenomenon (Creswell and Clark, 2018).

All identifying information was replaced with pseudonyms. Braun and Clarke's (2006) six-step approach to thematic analysis is a useful framework of coding and analysis, as it allows the researcher to summarise key features in the data set while simultaneously highlighting key similarities and differences within the data. Coding is the process of grouping evidence and labelling ideas so that they reflect increasingly broader perspectives (Gray and Grove, 2021).

The process involved (Braun and Clarke, 2006) is as follows:

1. Becoming familiarised with the transcribed data provided by 11 interviewees.
2. Initial numerical coding of data to identify the important features of the data. This was based on texts that contained elements of 'judgements' around teenage pregnancy, mothering, home teaching and learning.
3. Further grouping and subdivision of the codes in terms of shared meaning, so that they were clustered into general themes or patterns of meaning that cut across the data set, relating to the research questions.
4. Reviewing of the themes in terms of the identified research questions for the study and generating a thematic map.
5. Actively engaging with the data to refine and name themes that were generated.
6. Conclusions and insights deduced relating to the research question concerning how teenage mothers cope with teaching and learning during the pandemic.

The main themes that emerged from the transcribed data were:

- Social disconnectedness.
- Inability to cope with online learning.
- Challenges experienced by teenage mothers.
- Environment for home learning during lockdown
- Coping mechanisms used to learn during lockdown.
- Learning support received by teenage mothers.

3.7 MEASURES TO ENSURE TRUSTWORTHINESS

The measures to ensure trustworthiness in this study were based on Lincoln and Guba as cited in Polit and Beck (2020) and Creswell and Clark (2018). The criteria for assessing and ensuring trustworthiness of a qualitative inquiry are credibility, transferability, dependability, confirmability, and authenticity. The strategies will be described with reference to each of the five above mentioned criteria.

3.7.1 Credibility

Credibility refers to the confidence in the accuracy of the findings (Flick, 2018). According to Laher et al. (2019) credibility refers to claims about causality and depends on the quality of the evidence presented in the study. Credibility means ensuring that findings and interpretations reflect the multiple realities of research participants (Williamson and Johanson, 2018). The researcher spent sufficient time (1-2 hrs) with each participant during preparatory phase and another hour in one-to-one interviews (data collection phase) so that they built a relationship of trust, and for the participants to feel at ease and free to verbalise their experiences in order to ensure credibility. **Persistent observation** refers to the researcher's focus on the characteristics or aspects of a situation or a conversation that are relevant to the phenomenon being studied (Polit and Beck, 2020). To ensure persistent observations during interviews, the researcher observed for any verbal and nonverbal cues and field notes were kept (Polit and Beck, 2020). **Member checking** refers to returning transcripts to participants and providing them with the opportunity to verify the meaning the researcher had given to their words (Fouché et al., 2021).

According to Gray and Grove (2021) member checking is sharing a written description of an interview with the participant or scheduling another interview with a participant to confirm data from the first interview. The researcher took summaries of the findings back to key participants in the study and asked them whether the findings were an accurate reflection of their experiences to ensure member checking (Creswell and Clark, 2018). Furthermore, this ensured that the researcher had accurately translated the participants' viewpoints into data to decrease the chances of misinterpretations.

The researcher was assisted by the supervisor and the art-based expert to ensure that collection of data produced rich, thick data, rather than superficial data to ensure credibility (Fouché et al., 2021).

3.7.2 Transferability

Transferability means the provision of sufficient detail to allow readers to judge the applicability of findings to other contexts (Flick, 2018). According to Fouché et al., (2021) transferability of research findings refers to the extent to which a study's findings can be applied in other contexts and studies. It means a qualitative study's output should be recognisable not only by other scholars or readers in the field, but also by the context within which the study has been conducted (Laher et al., 2019; Fouché et al., 2021). The researcher ensured transferability by providing a dense description of the background information about participants, the research context and setting to allow others to assess whether the findings can be transferable (Gray and Grove, 2021; Leavy, 2022).

3.7.3 Dependability

Dependability refers to the provision of access to data that demonstrates the emergence of hypotheses and changes in understandings (Flick, 2020). According to Fouché et al. (2021) dependability refers to the stability of findings over time. Gray and Grove (2021) indicate that in order to ensure dependability, evidence that the study is reliable must be provided. This means that if another person wants to replicate the study, they should have enough information from the report to do so and obtain similar findings. The researcher used an inquiry audit (an outside person to review and examine the process) in order to establish dependability. An experienced independent coder was consulted for data co-coding to ensure confirmation of the results. The research setting, methods and instruments were detailed for replication (Creswell and Creswell, 2022).

3.7.4 Confirmability

Confirmability refers to whether independent readers of the study would come to the same conclusions on the basis of the evidence presented (Laher et al., 2019). Confirmability means that the study should have the ability to provide a chain of evidence between data and the conclusions that are reached (Flick, 2020). According to Fouché et al. (2021) confirmability refers to a self-critical attitude towards the researcher's own preconceptions and the need for continuous reflexivity. Furthermore, it implies that other researchers are able to confirm the origins of the derived findings and conclude that they would come to the same conclusions (Fouché et al., 2021). To ensure confirmability the researcher made the raw data available in the form of audio-taped interviews with participants and transcripts to verify the collected data (themes and categories). The researcher ensured confirmability by using an external coder to check whether the findings of the study were consistent (Fouché et al., 2021). Recorded observations in the form of field notes were available (Gray and Grove, 2021). This served to establish how confident the researcher was with the truth of the findings based on the research design, participants and content.

3.7.5 Authenticity

Authenticity refers to the extent to which researchers fairly and faithfully show a range of realities (Polit and Beck, 2020). According to Flick (2020) authenticity means provision of a balanced and fair view of multiple perspectives. Authenticity is determined by the researcher's demonstration of how the researcher remained true to the raw data (Lobiondo-Wood and Haber, 2022). Authenticity emerges in a report when it conveys the feelings and tone of participants' lives as they are lived (Polit and Beck, 2020). Authenticity was ensured by recording participants' voices during interviews and keeping verbatim transcripts, and by using quotes from participants (Polit and Beck, 2020). The researcher involved participants in the data analysis process and helped negotiate consensus on the final interpretation of the data.

3.8 ETHICAL CONSIDERATIONS

3.8.1 Informed consent

Informed consent is a specific agreement about what inclusion of the study involves and what will be the role of the researcher (Fouché et al., 2021). According to Gray and Grove (2021) informed consent refers to prospective participants' agreement to participate voluntarily in a study, which is reached after the subject assimilates essential information about the study. Informed consent is based on the principle that individuals capable of giving informed consent have the right to choose freely whether or not to participate in research (CIOMS, 2016; Gray and Grove, 2019; Lobiondo-Wood and Haber, 2022). Informed consent requires that the person involved should have legal capacity to give consent, be so suited as to be able to exercise free power of choice, without intervention force, fraud, deceit, duress, over-reaching or any ulterior form of constraint or coercion, and should have sufficient knowledge and comprehension of the subject matter so as to enable him or her to have understanding and make an enlightened decision (CIOMS, 2016; Merz, 2018). Informed consent protects the individual's freedom of choice and respects the individual's autonomy (CIOMS, 2016; Lobiondo-Wood and Haber, 2022).

Before undertaking research involving children the researcher must ensure that a parent or a legally authorised representative of the child has given permission and the agreement (assent) of the child has been obtained in keeping with the child's capacity, after having been provided with adequate information about the research tailored to the level of maturity (CIOMS, 2016). In order to treat individuals as autonomous minors, teenage mothers were provided with complete information about the study and decided on their own whether to enrol and the researcher ensured that participants' names did not appear anywhere in the study and the information they provided was confidential to protect participants from social stigmatisation and victimisation. Children may not have the capacity to make fully informed decisions about what they do or what happens to them. According to CIOMS (2016) children who are legally minors cannot give legally valid informed consent, but they may be able to give assent.

Assent giving means that the child is meaningfully engaged in the research discussion in accordance with his or her capabilities (CIOMS, 2016). According to CIOMS (2016) the process of obtaining assent must take into account, not only the age of children, but also their individual circumstances, emotional and psychological maturity, intellectual capabilities and the child's family situation. Refusal of a child to participate or continue in the research must be respected by the researcher. Informed written consent was requested from each participant of the study before taking part in the research. A thorough explanation regarding the study proceedings and expectations was given to participants before signing the consent form and commencement of data generation (Creswell and Creswell, 2020). The researcher explained the purpose and the nature of the study to the participants and informed them that participation was voluntary (Gray and Grove, 2019). Participants were given ample time to review the consent form before signing it. Participants were also furnished with enough information about the study through the information sheet and be required to voluntarily complete the informed consent form (declaration of consent) based on their understanding of the information.

3.8.2 Confidentiality and anonymity

The research participant has the right to anonymity and the right to assume that all data collected will be kept confidential (Gray and Grove, 2019; Lobiondo-Wood and Haber, 2022). According to Bordens and Abbot (2018) anonymity means that the researcher must assure that participants cannot be identified as participants in a study. Confidentiality means that the researcher must guarantee the security of their responses (Bordens and Abbot, 2018; Williamson and Johanson, 2018). Participants were assigned codes to avoid using real names for protecting their anonymity and so that the researcher would not link a participant's identity to an individual's responses (Lobiondo-Wood and Haber, 2022). The researcher ensured that the master list of participants' names and code number were kept separate from the data collected to protect participants' anonymity (Gray and Grove, 2021). Furthermore, the researcher allowed study participants to generate their own identification codes to protect study participants' anonymity (Botma et al, 2022).

Confidentiality is the researcher's management of private information shared by a participant that must not be shared with others or with people known to participants without the authorisation of the participants (Gray and Grove, 2021; Lobiondo-Wood and Haber, 2022). The recipient (researcher) has the obligation to maintain confidentiality when information is shared in confidence (Gray and Grove, 2021). Confidentiality is grounded on the premises that participants own their own information and that only they can decide with whom to share all or part of it (Gray and Grove, 2019). The researcher ensured that any information (notes and recorded data) participants provide was not publicly reported in a manner that identified them and was kept safe and was not accessible to others except the researcher (Gray and Grove, 2019; Lobiondo-Wood and Haber, 2022). Another aspect that was used to ensure confidentiality was by making sure that the pseudonyms were attached to the collected data. Anonymity means even the researcher cannot link a participant's identity to that participant's individual responses (Gray and Grove, 2021). The records as well as other items associated with the interview were held in a password protected file accessible only to the researcher and the supervisor. After a period of five years, in line with the rules of the university, they will be disposed by shredding and burning.

3.8.3 Beneficence

The right to protection from discomfort and harm is based on the ethical principle of beneficence, which holds that one should do good and, above all, do no harm (Gray and Grove, 2021). This principle imposes on the researcher the duty to minimise harm and maximise benefits (Polit and Beck, 2020; Botma et al., 2022). The researcher should protect participants from discomfort and harm while ensuring they receive the greatest possible balance of benefits in comparison to harm (Bordens and Abbot, 2018; Gray and Grove, 2021). The researcher ensured that participants were not exposed to any physical, psychological, social and economic danger. The right to protection and exploitation of participants were respected by assuring that their participation or the information they provided were not used against them (Polit and Beck, 2020; Lobiondo-Wood and Haber, 2022).

Due to the COVID-19 pandemic the research preventive measures such as social distancing, wearing mask and sanitising as per protocol were always adhered to where participants were met physically (WHO, 2020).

3.8.4 Right to privacy

Privacy is an individual's right to determine the time, extent, and general circumstances under which personal information is shared with or withheld from others (Gray and Grove, 2021; Botma et al., 2022; Lobiondo-Wood and Haber, 2022). This information consists of one's attitudes, beliefs, behaviours, opinions and records (Gray and Grove, 2021). Data was not gathered from participants without their knowledge and individuals had the right to access their records. Participants' rights and privacy were protected as the data was not linked to any individual. The researcher ensured that the study was not more intrusive than it needed to be, and that participants' privacy was maintained (Polit and Beck, 2020).

3.8.5 Right to fair treatment/selection of participants

The principle holds that each person should be treated fairly and receive what he or she is owed (Gray and Grove, 2021; Lobiondo-Wood and Haber, 2022). The right to fair treatment means that the researcher must treat people who decline to participate (or who withdraw from the study after initial agreement) in a non-prejudicial manner, and that the researcher must honour agreements made with participants (Polit and Beck, 2020). Data generation was facilitated by treating participants fairly and respectfully and this also decreased the chances of participant withdrawal from the study (Gray and Grove, 2021). Furthermore, the researcher was punctual for each appointment and terminated the data generation at the agreed-upon-time (Gray and Grove, 2021). The researcher did not change the activities or procedures that a participant was to perform unless the researcher obtained the participant's informed consent (Gray and Grove, 2021). The selection of a population and the specific participants to study was fair so that the risks and benefits were distributed appropriately (Lobiondo-Wood and Haber, 2022).

Gray and Grove (2021) emphasised that the researcher should make an effort to include fair representation across the demographic characteristics when the study offers the potential benefit. The researcher ensured that the eligibility criteria were fully aligned with the research plan and that the selection criteria were both fair and appropriate to the research question. The participants were not discriminated against with regard to their culture or social values. All participants were informed about the purpose of the study and that they also had the right to withdraw consent at any time without loss of benefits. The researcher made sure that information shared with potential participants was accurate and clearly presented during recruitment. The researcher ensured that the benefits promised to participants were provided which included a copy of the study findings when the study was completed (Gray and Grove, 2021).

3.8.6 Respect for others

The principle of respect for others involves the right to self-determination, which implies that human beings are capable of controlling their own destiny and have the freedom to participate or not in research (Gray and Grove, 2021; Botma et al., 2022). Furthermore, individuals should be treated as autonomous agents, capable of controlling their actions without external control (Polit and Beck, 2020; Bordens and Abbot, 2018; Gray and Grove, 2021). Participants were made aware that they were not forced to participate in the study and that they were free to terminate/withdraw from the study at any time without penalty, and their decision would be respected (Gray and Grove, 2021; Lobiondo-Wood and Haber, 2022).

3.8.7 Promotion of social justice

The principle of social justice means that every person has an equal right to personal liberty and that social and economic equality demands that the needs of the least advantaged be given priority and the principle of equal opportunity be applied to all available positions (Flick, 2020). Campbell-Crofts (2013) indicated that respecting the principle of social justice involves concern for fairness and equity towards the participants, including people who may be remotely affected by the research during the recruitment phase regarding the risks and benefits of the research.

Equity in the benefits of research requires that research not disproportionately focus on the health needs of a limited class of people, but instead aims to address across different classes (CIOMS, 2016). Research with human participants typically requires that some persons or groups are exposed to risks and burdens in order to generate the knowledge needed to protect and promote people's health (CIOMS, 2016). In this study, the researcher ensured that teenage mothers participating in the study, as vulnerable persons, were not targeted to participate in the study for the convenience of the researcher. The researcher ensured that all teenage mothers meeting the inclusion criteria were offered the opportunity to participate in the study and benefit from participation and were free from discrimination.

3.8.8 Social value/ research output

The social value refers to the information that a study is likely to produce (Council for International Organizations of Medical Sciences, 2016). The social value requirement states that research involving human subjects is only ethical if it has the potential to produce socially valuable knowledge (Wenner, 2021). According to the Nuremberg Code (1947), the study should be such as to yield fruitful results for the good of society and not be of a random and unnecessary nature (Wendler, 2018). Furthermore, the social value of a research project must be sufficient to justify the risks and burdens of the research participants and communities from which they are recruited (Barsdorf and Millum, 2017). The researcher ensured that social value was maintained by involving the participants in sharing the findings and giving feedback to the community members and other stakeholders at the end of the study. The researcher made participants aware that the findings of the study may be published in journals and presented at conferences, but informed consent would be sought from participants before publications and dissemination of findings. Moreover, the researcher ensured that every participant involved in the study had insight into the preliminary report to suggest changes or improvements of a factual nature for the final report (Fouché et al., 2021).

3.9 CHAPTER SUMMARY

In this chapter, the research design and methods, and research paradigm grounding the study were discussed in detail. The activities and techniques followed in the study were outlined together with the preparations and plans for individual semi-structured interviews, and the instruments used for data generation and data analysis methods were also discussed. The ethical considerations which were adhered to in the process of the study and measures to ensure trustworthiness were also outlined in this chapter. In chapter 4, the findings of the study are analysed, discussed and interpreted according to the themes and categories that emerged during the interviews.

CHAPTER 4: PRESENTATION OF FINDINGS OF THE STUDY

4.1 INTRODUCTION

The purpose of this study was to explore and describe the teaching and learning coping strategies adopted by teenage mothers in the rural communities of Makhado Municipality during coronavirus disease lockdown in Limpopo, South Africa. The previous chapter presented the research design and methods and research paradigm grounding the study, which was discussed in detail. In this chapter the results of the study are analysed, discussed and interpreted according to the themes and sub-themes that emerged from the generated data.

The purpose of the study was achieved by attaining the objectives of this study which were to:

- Explore and describe the teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown in the rural communities of Makhado Municipality in Limpopo, South Africa.
- Describe the evidence of successful teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown in the rural communities of Makhado Municipality in Limpopo, South Africa.

4.2. PRESENTATION OF THE FINDINGS

- The study findings will be presented under the demographic and the thematic findings.

4.2.1 Demographic profiles of the participants

Eleven (11) teenage mothers participated in this study. They were in grade 9 and 10, living with their parents and grandparents and siblings of three to six, some with extended family members including aunts and cousins. There was one child-headed family where the participant had to take care of her two siblings, aged 9 and 12, in grade 4 and 7 respectively and the baby.

Three (3) participants live in four to five-roomed houses where one (1) of them had to share a bedroom with siblings and the baby. Most participants had single parents, mothers who had no tertiary education and were unemployed. The source of income from five (5) families is from those parents who are employed, of which one (1) the father is a handyman, one (1) single mother is self-employed supplementing the income with granddaughters' child support grants and the other two (2) families depended on grandparents' social grants for support and household items for daily living.

Table 4.1: Participants' assigned names, their ages and number of children.

Assigned names	Age	Number of children
1. Bianca	16	01
2. Lufuno	17	01
3. Connie	18	01
4. Rofhiwa	16	01
5. Khathu	16	01
6. Prudence	15	01
7. Thandi	19	01
8. Violet	17	01
9. Ndivhuwo	17	01
10. Talifhani	19	01
11. Olivia	17	01

4.2.2 Thematic findings

Thematic analysis was used to analyse the transcribed texts and participatory arts, intended at identifying main themes and sub-themes which were discussed in the previous chapter. Braun and Clarke's (2006) six-step approach to thematic analysis was a useful framework of coding and analysis, as it allows the researcher to summarise key features in the data set while simultaneously highlighting key similarities and differences within the data. Themes were developed by exploring relationships between codes and grouping them by an interpretive statement (Gray and Grove, 2021). The six main themes and sub-themes emerged from the participants' raw data as summarised in Table 4.2 below. A detail description of the themes and sub-themes will be given below and direct quotes from participants will be used to support those themes.

Table 4.2 Table of themes and sub-themes

Themes	Sub-themes
1. Social disconnectedness	Limited contact with peers and teachers Inability to cope with self-study. Stigma and discrimination experienced by teenage mothers at home and school
2. Inability to cope with online learning	Access to gadgets and data bundles for learning
3.Challenges experienced by teenage mothers	Individual's internal stress Caring and supporting the baby not easy

4.Environment for home learning during lockdown	Resources available for home learning Unfavourable learning environment
5. Coping mechanisms used to learn during lockdown	Adaptive learning-mothering strategies used by teenage mothers
6. Learning support received by teenage mothers	Parental support Peer support Teachers' support

4.2.2.1 THEME 1: SOCIAL DISCONNECTEDNESS

Data analysis revealed social disconnectedness as the first broad theme. The sub-themes that emanated from the data were limited contact with peers and teachers, inability to cope with self-study, and stigma and discrimination experienced by teenagers during pregnancy and motherhood.

4.2.2.1.1 Limited contact with peers and teachers

Findings revealed that teenage mothers were frustrated because of the restrictions of movement caused by coronavirus lockdown. The COVID-19 lockdown meant that other participants had limited contact with teachers and peers for learning support. Some participants indicated that it was not easy to study on their own at home without guidance from teachers as no one was available to assist them to be able to concentrate on their schoolwork. Some participants reported that face-to-face learning was better as teachers were able to teach a lot of content in class as opposed to during the pandemic. Furthermore, participants expressed difficulty in getting childcare relief when studying. This was highlighted by Thandi saying,

“Learning before corona was all right because Mam was able to teach a lot of content in class and we learnt more. Then with this corona I had to study on my own. It was not

easy, I couldn't visit my peers for assistance with schoolwork, no one was available to take care of my baby and I had to fetch her at the crèche after school."

Connie expressed: *"It was boring a little bit I wanted to do some of my schoolwork with my peers and friends, and we were even afraid to go out of our homes because of corona. I asked myself when the pandemic is going to end. I couldn't meet my teachers"*.

This was supported by Prudence by saying, *"Teachers did not assist us during lockdown, and there was no platform to continue with learning"*.

During school closures and social distancing rules in the COVID-19 pandemic, adolescents faced strong restrictions for personal meetings with their friends (Dändliker et al., 2022). A study conducted by Demkowicz et al. (2020) in the United Kingdom revealed that lockdown was a time of change, loss and uncertainty, heightened emotionality and frustration. According to Coetzee et al. (2021) children described feeling frustrated about having to stay at home and missing their peers, teachers and school. The study by Senft et al. (2022) conducted in Austria found that students exhibited considerable signs of impairments of mental health as well as critical behavioural changes with regard to dealing with work assignments and learning motivation. Moreover, mostly impaired during the time of distance learning are the social contacts within the peer group, but frequency and quality of contact between teachers and students are also considerably reduced. These challenges meet educationally disadvantaged children and adolescents from families with rather lower socio-economic status particularly hard (Senft et al., 2020).

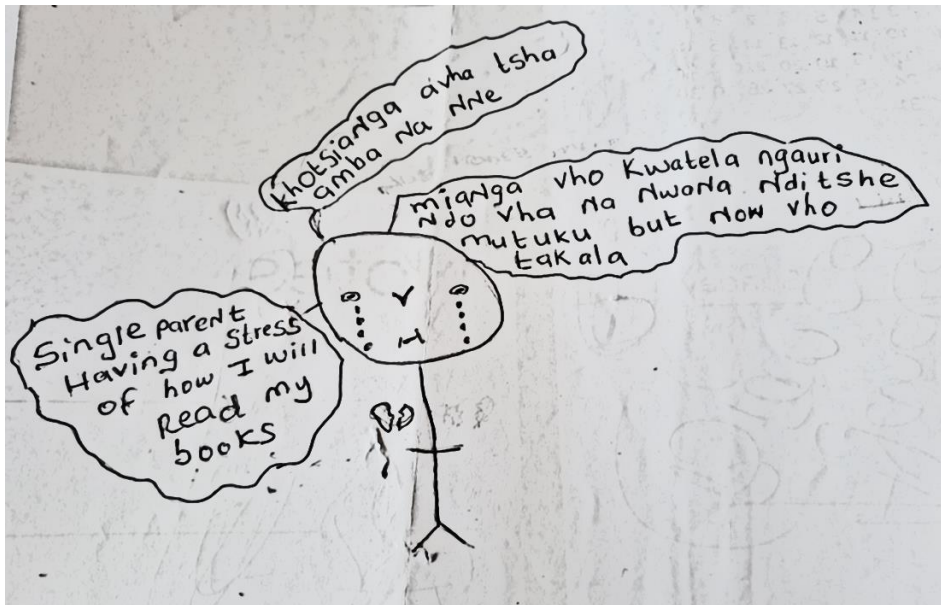
Some learners would attempt communication with their teachers through text messages in order to ask questions or seek clarification, but this was not always successful (Duby et al., 2022). Apart from the obvious negative effects that school closures have on learning and education, young people also experience a loss of pastoral support, and social interactions inherent in the classroom as well as socialisation (Marques and Braidwood, 2021). The study findings by Laher et al. (2021) revealed that the loss of face-to-face interaction with teachers makes it harder to access both educational and psychosocial support from teachers, thus creating barriers to comprehension of the subject content.

Loss of social connections can lead to periods of loneliness or feelings of disconnectedness, which ultimately have an impact on students' well-being (Burns et al., 2020). Children felt disconnected from their friends at home and at school reconnecting with friends was obstructed by disease containment measures (Coetzee et al., 2021). The study by Ivanec (2021) found that students who perceive a greater lack of academic social interactions also report more learning and self-regulation difficulties during online studying. Furthermore, the perceived lack of academic social interactions affects students' perceptions of life disruption caused by the pandemic and adjustment to online studying. Magson et al. (2020) found that not being able to see their friends as much as unusual was of great concern for many adolescents; feelings of social disconnection were associated with higher levels of anxiety and depression and less life satisfaction. A study conducted by Jansen (2020) of South African children revealed that they found it hard to study in isolation and required the structured space of a classroom. Furthermore, the children's experiences of learning under lockdown were emotional distress during this period, and some of them reported a feeling of loneliness after being separated from their friends and teachers.

4.2.2.1.2 Inability to cope with self-study

This study revealed that some participants felt disheartened and less motivated to study at home and highlighted that it is not easy for teenage mothers to study at home and take care of the baby at the same time. Other participants felt discouraged to study on their own and reported this to be tough as their babies were bothersome wanting to bond and be breastfed. The study also found that learning from home was fraught with interruptions such as too many house chores. Some participants, as much as they wanted to learn from home on their own during lockdown, experienced the feeling of shame and guilt about being a teenage mother. The study also found that some participants indicated that it was worse during the coronavirus lockdown period than before the pandemic because there was nothing they could have learned, which meant that they had to study on their own with an excessive workload. Some participants reported that learning from home was a struggle and not possible because study materials were not available, e.g., study table or desk.

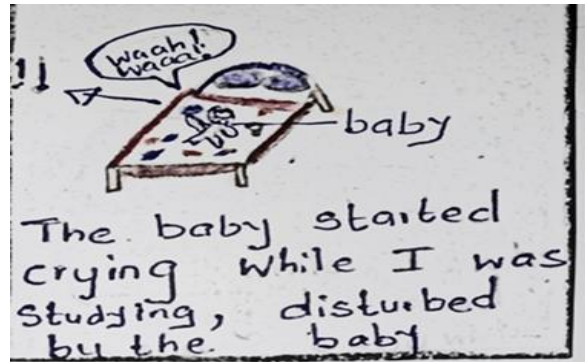
Rofhiwa said, "It was tough. When I touched my books I felt tired and discouraged. I tried studying on my own, it worked for me just a little".



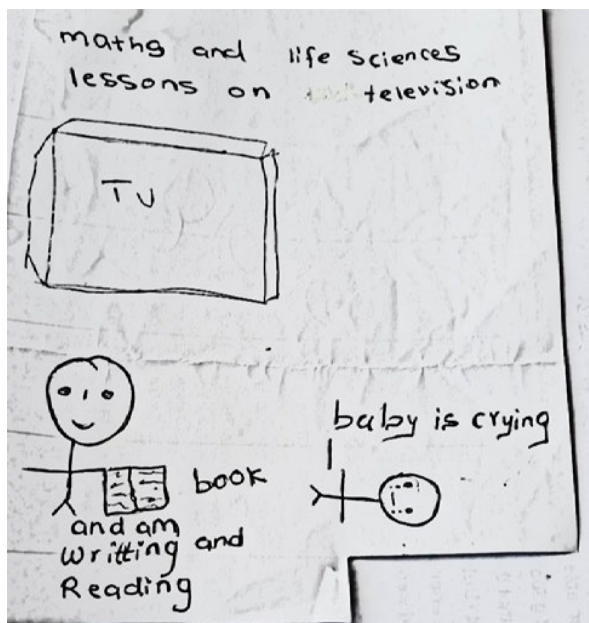
Bianca, aged 16

"Being a single parent, I have stress of how I will read my books. Khosianga avha tsha amba na nne. Mianga vho kwatela ngauri ndo vha na nwana nditshe Mutuku but now vho takala. "Ndi khou lila hafhanoni kha tshinepe ngauri ndina thaidzo. Mbilo yanga yo kwashekana ngauri vhabebi vhang vhovha vho kwatela. Mbilo yanga yo kwashekana ya bva yavha zwipida ngauri ndo talana na khotsi anwana".

Translation "Being a single parent, I have stress of how I will read my books. My father is not talking to me anymore and my mother is angry with me because I had a baby at an early age but now she is happy. I am crying here on the drawing because I experienced stress. My heart is broken on the picture because my parents are angry with me. My heart is in pieces because the father of my baby broke up with me".



Thandi, aged 19



Khathu, aged 16

"Nga tshifhinga tsha COVID 19 ndo vha ndi hwala. Ha swika tshifhinga tshenda vha na nwana ri kha lockdown. Ritshi khou funziwa ri ma hayani. Nne ndo vha nitshi khou funziwa ng auto lavhelesa TV hovha huna dzi lessons dzine dza funziwa kha TV mara tshinwe tshifhinga ndovha ndi sina tshifhinga tsha u guda ngauri nwana ovha a Mutuku atshi kola musi ndi busy na u guda asoko lila. Nda thoma nda lindela atshi edela nda kona u guda. Musi ditshi humela tshikoloni nwana na ovha asina musali nae ndo mbodi nyanga muthu wau mulela musi ndi tshikoloni nda mubadela nwezi u tshi fhela. Vhatshi muisa na sibadela u thavhiwa. Tshinwe tshifhinga ndo vha ndi tshi vuwa vhukati ha vhusiku ndi tshi itela u vhala nwana o edela"

Translation: "In the time of COVID 19 I was pregnant. I gave birth during lockdown. We were taught from home I learned by watching TV there were lessons taught on TV but sometimes I couldn't have time to study because the baby was very young crying all the time even when breastfed while I was busy studying. Then I waited for the baby to fall asleep so that I can study. When we went back to attend classes I had nobody to babysit the child. I hired a nanny to take care of the baby while I was at school of which I paid her month end. The babysitter even took the baby to hospital for immunisation. Sometimes I came back late at night to study because the baby was asleep by that time".

This was supported by Olivia stating that, *“Learning at home as a mother was a struggle, it was not possible because I didn’t have a study table, and once something happens to the baby everything stops including schoolwork, you need to focus on your child and make sure that the baby is okay by all means, you need to breastfeed, you need to make sure that the baby is bathed, you need to make sure after doing all of those things, you still have to go to the clinic with the baby so everything wait when you have a baby.”*

Thandi said *“Learning before corona was alright because Mam was able to teach a lot of content in class and we learnt more. Then with this corona I had to study on my own, and the baby was bothersome and house chores were many. In the time of corona, it was worse compared to before the pandemic because there was nothing that we could have learnt; it meant we had to study on our own with too much workload. I couldn’t visit my peers for assistance with schoolwork, no one was available to take care of my baby and I had to fetch her at the crèche after school”*.

Ndivhuwo stated, *“Home learning was not fine because we missed some of the information and studying more from school. My mother assisted where she can but highlighted that she studied accounting not science subjects”*.

Lockdown prevents people from engaging in face-to-face contact and the absence of social contact has been negatively correlated to mental well-being (Polizzi et al., 2020). This can be alarming especially for young people and members of cultures in which social support (e.g., talking with peers, family members and teachers) is the basic coping mechanism (Urban and Urban, 2020). Many students in Burkina Faso shared feelings of stress, anxiety, isolation and depression which they linked to the lack of contact with their school community (Human Rights Watch, 2020). Adolescent girls and young women (AGYW) shared their experiences of how being deprived of face-to-face interaction with teachers and other learners fostered feelings of isolation and lacking support (Duby et al., 2022). Additionally, AGYW described challenges in not being able to ask teachers for clarifications or explanations, which left them feeling confused and unable to understand subject content. School closures have taken away vulnerable children’s coping mechanisms-friends and teachers- as indicated by Jolie and Azoulay (2020).

The findings of a study by Duby et al. (2022) found that rotational classes put learners under pressure in the sense that attendance was only on specific days and learning continued at home so that when the teacher arrived at least they were on par. The study findings by Duby et al. (2022) revealed that learners shared their experiences relating to the loss of face-to-face contact with teachers in the classroom setting and attaining support from teachers was challenging with remote classes.

4.2.2.1.3 Stigma and discrimination experienced by teenage mothers at home and school

The study revealed that some participants felt demoralised by people's remarks because of being a mother at an early age. One participant decided to change schools as a result of humiliation, degrading remarks and discernment and this led to the participant repeating a grade. Other participants reported that they were labelled and teased at school by peers talking behind their backs and neighbours did not accept them. One participant reported to being bullied, mocked and ridiculed by peers at school and friends were ashamed about her being a young mother.

Thandi stated, "People judged me as a teenage mother, and I did not feel fine because I didn't just swallow this baby. I know I did wrong to have a baby at a very young age, but I didn't swallow the baby, but people didn't accept my situation at school and my neighbours at home. Another reason why I failed and got demoralised is because when I was passing they remarked by saying 'this one with the abdomen'. The time I was pregnant when I approached them they would move away from me. Eish support! It was not there, I even decided to change schools because those people's remarks and words kept crossing my mind saying, 'you fell pregnant at a young age' because if I change school people there won't know that I have a baby, so that I can study that is why I managed to pass I am in grade 11".

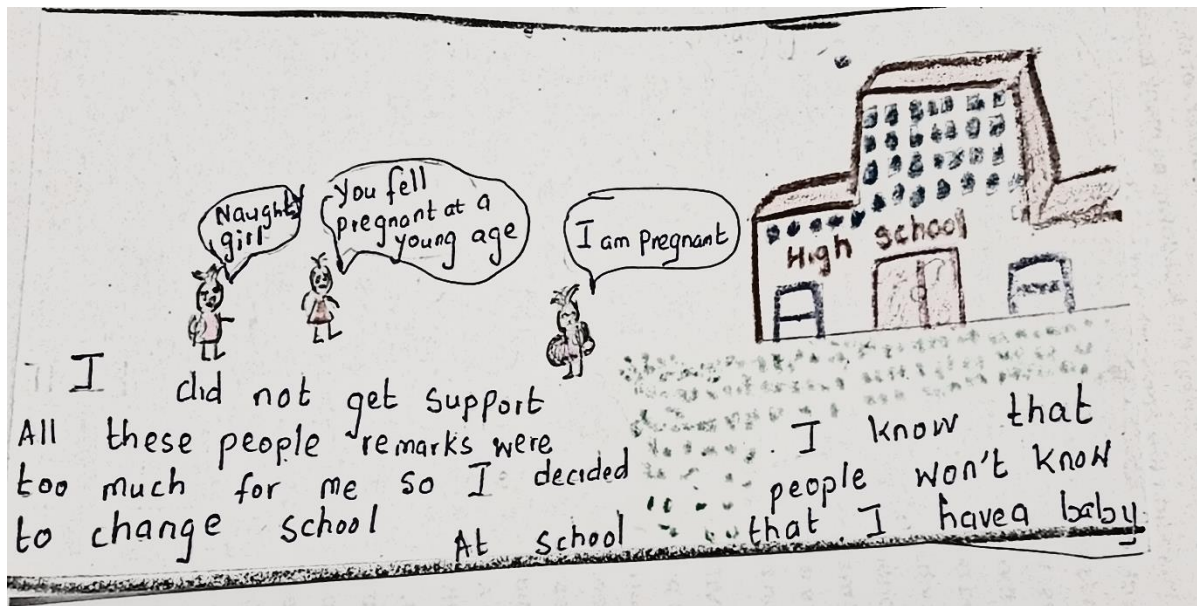
In order to obtain a rich wealth of data, the researcher probed further into the drawings provided. Participants drew pictures to express their emotions such as a broken heart, crying, feeling sad and distractions at home during COVID-19 lockdown.



Rofhiwa, aged 16

Another participant stated, *"It was not pleasant because we were labelled and teased by others saying supporting the baby is not easy"* (Bianca).

Olivia indicated that, *"Uhm, I was always studying and focusing on my books so when I started showing when I was pregnant my peers were laughing at me, some were bullying me, some of my friends were shocked because they knew how seriously I took school and how focused I was so they were very ashamed of me some were bullying me telling me that I am pregnant I have no future now I thought I knew everything look now and some of them they mocked me"*.



Thandi, aged 19

The expression by participants revealed that teenage mothers experienced the stress of dealing with learning and degrading words from peers at school. Active emotion-focused strategies such as minimisation and positive self-instruction were associated with lower levels of helplessness and a higher self-efficacy to cope with stress (Urban and Urban, 2020). The innately motivated learners are relatively unaffected in their learning as they need minimum guidance, while vulnerable group consisting of learners who are weak in learning face difficulties (Porkhel and Chhetri, 2021). Some academically competent learners from poor backgrounds are unable to access and afford online learning (Dändliker et al., 2022). The level of academic performance of learners is likely to drop for the classes held for both year-end and international examination due to reduced contact hour for learners and lack of consultation with teachers when facing difficulties in learning (Sintema, 2020). Pregnancy is the beginning of challenges for teenage mothers and their families (Makoni, 2021). Teenage mothers are faced with varying individual challenges that make it more difficult for them to finish schooling (Makoni, 2021). The community regards teenagers who fall pregnant as immoral and as a result these teenagers tend to hide themselves from people in general as well as peers and this often leads to depression as they lose contact with friends (Makoni, 2021).

In some countries like Kenya, girls faced multiple forms of discrimination in accessing education before the COVID-19 pandemic and were then confronted with additional discriminatory barriers to continuing formal education from a distance (Human Rights Watch, 2021). Furthermore, girls were likely to be expected to take on greater housework burdens and were less likely to have access to the internet than boys due to familial restraints and sometimes faced constraints on their interactions with others. A 16-year-old student in Garissa, Kenya reported that when her school offered no guidance on how to study during school closures, she tried to get in touch with one teacher (Human Rights Watch, 2021). This was not possible as the teacher suggested that learners should come to his house instead. Boys would consult but girls reported to be afraid to visit the teacher's house for questions and clarification on their schoolwork (Human Rights Watch, 2021).

4.2.2.2 THEME 2: INABILITY TO COPE WITH ONLINE LEARNING

Data analysis also revealed inability to cope with online learning as a second broad theme. The sub-theme that originated from the data was access to gadgets and data bundles for learning.

4.2.2.2.1 Access to gadgets and data bundles for learning

In this study some participants reported that they struggled with learning online as they couldn't afford data bundles to do their schoolwork at home during the pandemic because of financial constraints. Other participants couldn't even afford to have a smartphone and computers or laptops were not available at home to study online and this made the participant miss certain information posted on WhatsApp and they had to rely on their parents' gadgets which were not always accessible and may result in infringement of parents' privacy. Others would ask to see the work posted on their peers' phone the following day at school during rotational classes. The spirit Ubuntu says people shall share, hence the Tshivenda proverb *Vhana vha musadzi vha thukhulelana thoho ya nzie* meaning 'people shall share'.

Thandi stated, *"I didn't even have a smartphone to study online; it was just a book only. If there was certain information that was posted on WhatsApp group I would then ask someone at school in the morning to update me with the work"*.

Olivia supported by saying, *"It wasn't easy because I did not have a smartphone by that time I use to use my mother's phone and I was only allowed to use the phone while I was at home or when she was not using it. My parents couldn't afford data sometimes I couldn't even check the homework and the assignments that were posted on WhatsApp group so the money wasn't enough after they bought food for me and my siblings and sometimes for my baby because the father of my baby couldn't send money every month, he sent it when he was able to, so it was hard for us"*.

Ndivhuwo supported by saying, *"I was frustrated because no one bought me data bundles and at school they didn't post anything on WhatsApp regarding learning. Then we had to do rotational classes, and this didn't work for me because I needed more time to come to school so that I will understand more so as to get further assistance from my mom when I arrive home"*.

The restrictions of movement and school closures following the proclamation by the president of the country in SA were challenging for most teenage mothers as they struggled to cope with these changes. Surprisingly, the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) expected that every child in the world should have access to education during the pandemic and should not be left behind (WHO, 2020). Obtaining the quality education is the foundation for improving people's lives and ensuring sustainable development (United Nations-ECLAC, 2018). Sustainable Development Goal 4 (SDG) is aimed at ensuring inclusive and equitable quality education and promotes lifelong learning opportunities for all (United Nations-ECLAC, 2018). Continuing of teaching and learning was not possible for all learners in South Africa, especially those coming from low socio-economic backgrounds because most of them did not have access to gadgets such as smartphones and data bundles for home learning. The availability of the internet and the cost of internet packages determine the continuity of online learning (Basar et al., 2021). However, in practice, the study also found that students experienced limited internet access because of their geographical location or as a result of limited finances with which to purchase data bundles (Suryaman et al., 2020; Basar et al., 2021).

Many educators, learners and parents in southern Africa have inadequate or no access to computers, laptops and cell phones, which are necessary for online teaching and learning (Mukute et al., 2020). Moreover, some learners lack money to buy data bundles, while others do not have radio or television. Families with one or few computers compete for limited resources with parents needing to use the computers for work and children needing to use them for schoolwork (Mukute et al., 2020; Basar et al., 2021). According to Mukute et al. (2020) home-schooling also surfaces educational quality and equity issues for students, which arise from differential access to digital devices to work and learn online. A parent in Zimbabwe shared how her four children in different classes have to compete for one digital device to support their online learning (Mukute et al., 2020). Whilst access to a smartphone is relatively high in South Africa, phones are often shared amongst several members of the household, and data is expensive, which hampers learners' access to e-learning (Majanja, 2020). Learners from socio-economically disadvantaged households are often unable to afford e-learning technologies, both in terms of devices and data, necessary for remote learning (Chauke and Chinyakata, 2020).

Similarly, to Brazil, most South African learners are from poor socio-economic backgrounds with limited access to the internet and technologies for accessing online learning opportunities (Vale and Graven, 2022). Findings in a study by Vale and Graven (2022) indicated that WhatsApp was a dominant platform used because teachers stated that learners did not have sufficient data to use other applications. School closures during the pandemic confronted students with new challenges (Wang et al., 2020). For certain adolescents, these sudden changes in the educational setting and educational demands might have exceeded their resources (Wang et al., 2020). Many parents are burdened by costs associated with trying to continue with educating their children (Human Rights Watch, 2020). Learners living in rural areas are less likely to have resources to adapt and implement measures needed to continue with education during school closures, including access to the internet and flexibility to shift school calendars, which have been adjusted to fit seasonal harvests (Human Rights Watch, 2020). Children living in difficult situations have experienced challenges with distance learning (Munir, 2021).

These challenges include digital deficiency and the inability of parents to help children in their learning. Access to educational resources and support was lower in poorer (compared with richer) countries (Goudeau et al., 2021). A study by Duby et al. (2022) found that buying enough data to use for video calls was prohibitively expensive for AGYW from financially constrained households. Children from low-income families were more likely to be excluded from online distance learning because of an inability to afford sufficient internet connectivity or devices (Human Rights Watch, 2021). A mother in Lagos, Nigeria, who lost an income due to the pandemic, said she couldn't afford online studies for two of her children (Human Rights Watch, 2021). A father in Mumbai, India indicated that they had only one computer at home which was particularly used for working from home for both the wife and him, so it was not possible to let his two children use it for schoolwork (Human Rights Watch, 2021). The study by Kapasia et al. (2020) conducted in India investigated how lockdown impacts students' learning performance; the findings revealed that the lockdown made significant disruptions to learners' learning experiences. Educational concerns may have been particularly salient during school closures associated with the COVID-19 pandemic (Dändliker et al., 2022).

First, adolescents were deprived of routine habits associated with going to school, such as clear daily structures and regular interactions with peers and teachers and faced uncertainty about future educational achievements (van Loon et al., 2021; Mthethwa, 2020a; Taylor, 2020a). Moreover, recent evidence pointed to increased worries about being behind and getting delayed in school (van Loon et al., 2021). Findings by Lee (2020) revealed that educational concerns such as being worried of not understanding the subject matter may pose a risk for adolescents' well-being and thus increasing stress associated with new educational challenges during the pandemic leading to lower mental health.

4.2.2.3 THEME 3: CHALLENGES EXPERIENCED BY TEENAGE MOTHERS

This is the third broad theme that emerged from the analysed data. The sub-themes that emanated from the data were individual' internal stress and, caring and supporting the baby not easy.

4.2.2.3.1 Individual's internal stress

The study revealed that some participants experienced stress as a result of emotional and physical draining caused by home learning and caring for a baby at the same time. This led to feelings of exhaustion, and this discouraged them to learn from home. Some participants felt demoralised and wanted to give up schooling because of the challenges they encountered as young mothers. Some participants reported that the relationship with the father of their babies was sour; some broke up with the father of the baby. Other participants indicated that the relationship ended and was abandoned by the father of the baby and further accused her of cheating not accepting the responsibility to care for the baby. Revealing pregnancy to parents was tough for some of the participants in the study, as parents were angry with teenage mothers, some participants were afraid to inform the parents about their pregnancy.

Connie said, *"There is a lot of information here in my head, when I was pregnant I was pregnant I was afraid to express myself at home because my mother once said if I fall pregnant she will 'kill' me. I am crying on the picture because I am always fighting with the father of my baby, he accuses me of this and that, he said I have been cheating on him. The time my mother discovered that I was pregnant she couldn't speak to me for the whole week. She was very upset"*.

Bianca said, *"I am crying on the drawing because I experienced stress and my mother was angry with me for being a mother at my age"*.

Rofhiwa uttered, *"It was tough. When I touched my books I felt tired and discouraged"*.

The study by Govender et al. (2020) revealed that some adolescent mothers' partners were in denial and rejected them and the child while others' partners were happy and supported them during their pregnancy. Families' reactions to the pregnancies ranged between anger and disappointment, and silent treatment and acceptance and forgiveness (Govender et al., 2020). The study conducted in Massachusetts by Pueyo (2022) to find the baseline data on the incidence of teenage pregnancy and determine the challenges that surround these young mothers revealed that one teenage mother had mixed feelings regarding her becoming a mother. On the one hand, she felt excitement, but most of the time she was bothered, shaken, and afraid (Pueyo, 2022).

The defining attributes which are stress, anxiety, financial pressure, social rejection and social isolation give a clear picture of the detrimental effects of the concept of COVID-19 lockdown related teenage pregnancy (Govender, 2020; Kapasia et al., 2020; Makoni, 2021). The study by Govender et al. (2020) also found that some adolescent mothers experienced physical and emotional exhaustion every day from taking care of their babies. Despite the positive aspects of motherhood, the girls faced challenges that affected their lives (Pueyo, 2022). Most often, the challenges included coping with increased responsibilities following the birth of the baby, and managing the competing demands of schooling, work, and taking care of a baby. Furthermore, being young and still so inexperienced, facing motherhood was quite a daunting experience to some of the young mothers. The young mothers indicated they received good support from their mothers, siblings and close friends, but rarely from the father of their baby and the wider community (Pueyo, 2022). Moreover, participants felt that teenage mothers are frowned upon by their wider ethnic communities, which left them with feelings of shame and embarrassment, despite the personal perceived benefits of achieving motherhood. According to Mangeli et al. (2017) teenage mothers stated that accepting the role of motherhood is associated with emotional and mental distress such as fear and worry, regret and frustration, guilt and shame.

4.2.2.3.2 Caring and supporting the baby not easy

The study found that some participants had challenges with meeting the financial and material needs of the baby such as buying nappies, nanny's monthly payments and crèche fees so that they could attend rotational classes. One participant reported that she had to take the baby to the crèche before going to school and used social grants for fees and the grandmother of the baby was unemployed and had to hustle to make ends meet. Furthermore, the participant was taking care of her siblings and the baby because their mother was not at home most of the time.

Khathu indicated that, *"When we went back to attend classes I had nobody to babysit the child. I hired a nanny to take care of the baby while I was at school of which I paid her month end"*.

Thandi stated, *"I used 'SASSA' (child grant) money to pay for crèche and the money that my mother sent I bought my child some of the items. I had to take care of my younger brothers when my mom went to hustle. The only challenge I experienced was only the baby because crèches were closed during lockdown I took my baby to someone in the village to look after her, so that I can attend school during rotation"*.

Bianca highlighted that, *"People will tease you and to support a baby is not easy, I mean buying nappies 'pampers'"*.

The transition into motherhood can be a turbulent time for adolescent girls as they struggle with conflicting identities of being an adolescent, a mother and an adult (Govender et al., 2020; Kapasia et al., 2020; Makoni, 2021). The adolescent mother has numerous responsibilities as well as taking care of her own educational and developmental needs (Govender et al., 2020). One of the main challenges faced by teenage mothers was ineffectiveness; they lack sufficient knowledge and skills for a successful maternal role and therefore depend on others (Mangeli et al., 2017). Furthermore, many teenage mothers had a knowledge deficit, and their information was not enough to take responsibility for maternal and child-care. Some adolescent mothers in a study by Govender et al. (2020) described that motherhood instilled the roles of being a provider and nurturer, and the additional responsibilities were the impetus that shaped the adolescent mothers as providers and nurturers which became an everyday reality. The study by Govender et al. (2020) also found that some teenage mothers experienced financial constraints and difficulty in returning to school.

Concentrating on schoolwork during COVID-19 lockdown required a high level of self-discipline (Duby et al., 2022). In addition, female participants who have babies and have to juggle parenting responsibilities with schoolwork faced extra disturbances. Some participants in the study by Duby et al. (2022) also pointed out that there are problems at home because sometimes the baby doesn't want other family members and wants the mother's attention, which affects learning at home.

4.2.2.4 THEME 4: ENVIRONMENT FOR LEARNING DURING LOCKDOWN

This is the fourth theme that originated from the data. The sub-themes that emanated from the analysed data were resources available for home learning and unfavourable learning environment.

4.2.2.4.1 Resources available for home learning

The study revealed that a positive learning environment with available resources and excluding distractions and disruptions motivates the learners to learn on their own during challenging times of lockdown. Some participants reported that the home environment was conducive for learning and had a study table and enough space without disturbances for learning. Some participants had smartphones, books and television was accessible at home to continue with learning.

Lufuno reported, *“The learning environment was conducive without distractions. I was studying well, and I had enough space for learning at home.”*

This was supported by Khathu stating, *“We were taught from home I learned by watching TV there were lessons taught on TV”.*

Violet indicated that, *“Learning from home was possible; the environment was favourable for me to learn as I had space and the table to study on”.*

According to Ashenberger et al. (2022) students reported low stress levels and positive well-being in their learning sessions during restrictions. The study by Ashenberger et al. (2022) revealed that the more students perceived that their physical learning environment was meeting their needs, the higher were their motivation and well-being and the lower was their stress. It is important that people create beneficial environments to exercise control over them (Bandura, 1997). Furthermore, people can influence what they become by selecting the environment carefully, and the choices they make are influenced by their beliefs and capabilities (Bandura, 1997). This study found that, despite the challenges and disturbances encountered by teenage mothers, they made the home learning environment positive to achieve their goals. It is evident that though other students around the world received assistance and resources to continue with learning from home during COVID-19 lockdown others did not have that

privilege. In Latin America, 90% of children received some remote learning, but less than half of that was through the internet the remainder being via radio and television (Goudeau et al., 2021). A teacher from Kenya reported that it was not possible for him to visit learners' homes for consultation, but they would rather come to his house (Human Rights Watch, 2021). Other participants watched classes on television but were not able to attend all of them because of household chores (Human Rights Watch, 2021). In sub-Saharan Africa, during lockdown, 45% of children had no exposure at all to any type of remote learning (Goudeau et al., 2021). Of those who did, the medium was mostly radio, television or paper rather than digital. The government of Uganda has also made efforts to support learning during school closures through TV, radio or newspapers, and through making available downloadable curricula and, in some instances, schools also offered learning content via mobile phones (Datzberger & Parkes, 2021). Some governments in the United States organised classes to be delivered over the radio and television (Human Rights Watch, 2021).

Many teachers deployed an array of distance learning techniques to try to further their students' education which included work packets distributed by hand, online teaching, and sending assignments by email and online messaging services (Human Rights Watch, 2021). However, many children were not given the opportunity, tools or access needed to keep on learning during the pandemic.

4.2.2.4.2 Unfavourable learning environment

The study revealed that some of the participants experienced disturbances while studying at home as the environment for learning was not that conducive as they had to juggle between schoolwork, house chores and giving their babies attention. Over and above, some participants struggled because of limited space for learning and unavailability of study a table and chair. The study also revealed that the environment was sometimes not favourable for learning since one participant had to share the kitchen table with family members which was a challenge because sometimes the mother would chase the participant out of the kitchen in order to use the table to chop the vegetables to prepare food.

This area was also used for dining and washing of dishes, and this meant that the participant had to wait until everyone had vacated the area, so that learning might continue. Furthermore, the baby was also a distraction because the participant had to wait until he fell asleep so that around early hours of the morning she could study.

Ndivhuwo stated, *"I didn't have a table for study; I used a bed to do my schoolwork. I would put my baby close to me on the bed, but I was thinking what if the child wakes up and tear off my books"*.

Olivia said, *"Because we are staying in a four (4) roomed house. I did not have access to study materials at home and I couldn't talk to my teachers. I did not have a study desk. My study methods were, the environment for me was not okay because I had to use the kitchen table which was very bad because sometimes they (family members) chase me out of the kitchen so that my mother can cook or she can do the dishes while I try to study and she would tell me that she needs to use that table to chop her veggies and everything else so, so I had to wait until everyone was done in the kitchen, everyone was finished so that I can study and I have to wait for my baby to sleep of which was also a distraction because I had to wait until he fell asleep so that around 3am or 2am and then I can study, then I have to sleep for an hour and wake up and make sure that everything was okay at home"*.

This was supported by Khathu, *"Then I will have to wait for the baby to fall asleep to continue studying"*.

The closing of schools and banning of public gatherings has shifted student education and learning from the schools and other non-formal education sites to their homes (Mukute et al., 2020). At a very basic level, many families in southern Africa do not have the space for both parents and students to work from home, which leads to competition for the use of limited home space for teaching, learning and work (Mukute et al., 2020). The spread of the coronavirus led to severely affected countries like Switzerland and Italy to take protective and containment measures, such as school closures and the conversion from in-school to distance learning. (Klootwijk et al., 2021). Due to these changes, adolescents faced new challenges in their educational environment, such as increased demand for self-centred learning, insecurities about their future and fear of grade retention, in particular (Klootwijk et al., 2021).

Prior to the pandemic learners at schools had desks, tables and chairs in their classrooms for learning then during COVID-19 lockdown they faced a challenge of not having a proper workplace for home learning due to poor backgrounds (e.g., a table and a chair at home). The nature of the home environment is vital to the success of remote learning (Munir, 2021). Additionally, poor families struggle with issues of quality housing and space for studying. A study in India by Kapasia et al. (2020) found that students reported some challenges that they faced during online classes. This included anxiety, depression and an unfavourable learning environment, all of which were aggravated when students were marginalised and from remote areas (Barrot et al., 2021). In many South African household, such as those in the communities in which the study was conducted, learners often do not have access to a quiet workspace, a suitable desk, learning materials, internet connectivity, a computer or educated adults who are able to assist with home schooling (Parker et al., 2020; Spaul, 2020; Reddy et al., 2020).

The findings of a study by Barrot et al. (2021) revealed that the online learning challenges of students varied in terms of type and extent. Their greatest challenge was linked to their learning environment at home. Jansen's (2020) survey of South African children revealed that they found it hard to study in isolation and required the structured space of a classroom. Moreover, the more they battled, the more their work accumulated, increasing their anxiety about being left behind. The stress was much higher for underprivileged children because of overcrowded environments and constant disruptions (Spaul and Vander Berg, 2020). According to Hebron et al. (2021) most of the participants experienced difficulties in concentrating on their schoolwork. Learning was disrupted, and social and emotional support was reduced (Crawley et al., 2020; Moltrecht et al., 2022). Participants also described challenges working from home, where it was tough to concentrate and focus due to multiple distractions such as television, other people and household responsibilities (Duby et al., 2022). Furthermore, participants highlighted that learning was difficult at home where parents ask them to do house chores.

Participants described challenges with studying in the home environment, explaining that household situations were not conducive to learning (Duby et al., 2022). Moreover, distractions from family members, childcare responsibilities, and lack of suitable space for studying make it difficult to focus on schoolwork. Evidence shows that learner achievement is strongly influenced by the extent to which the home environment is supportive of learning, and online educator support is also critical (Hannan and Arends, 2021).

4.2.2.5 THEME 5: COPING MECHANISM USED TO LEARN DURING LOCKDOWN

This is the fifth broad theme that emerged from the generated data. The sub-theme that emanated from this theme was adaptive-learning-mothering strategies used by teenage mothers.

4.2.2.5.1 Adaptive learning-mothering strategies used by teenage mothers

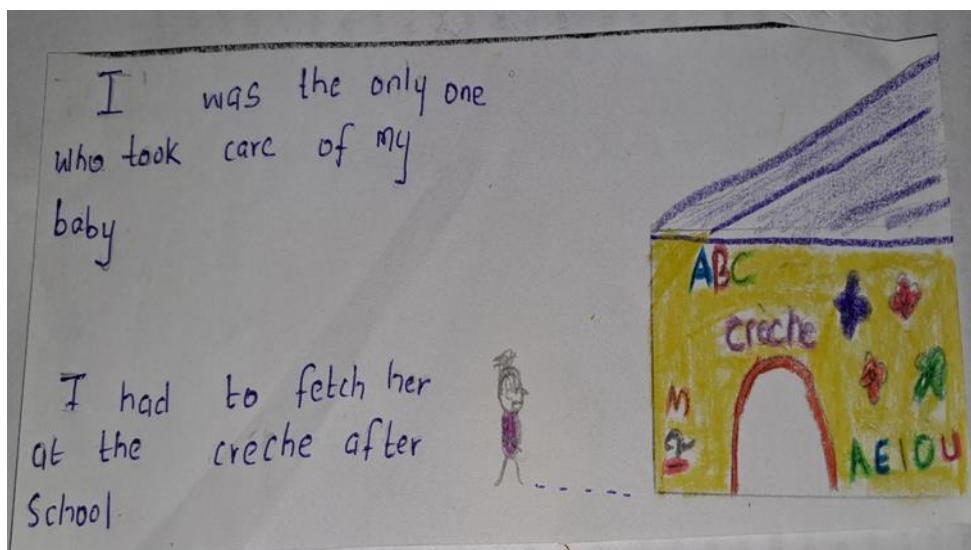
The COVID-19 outbreak has led learners to acclimatise themselves to home-based learning which was very challenging for some. Some participants in this study expressed that mothering coupled with home study and household errands left them feeling very exhausted. They further reported that they didn't have enough rest and sleep, and this pressure made one participant consider taking a gap year from school until the baby had grown. One participant indicated that it was tough dealing with the pandemic and mothering at the same time and taking care of the siblings but had to pull through in order to progress with her studies. The findings of the study found that some participants were able to manage their schoolwork because family members and caregivers were assisting with caring for the baby and this made them cope well with home learning and mothering. Other participants developed some coping mechanisms to deal with the new normal brought by COVID-19 lockdown and had to be positive about their schoolwork. Some participants developed a timetable for home learning and caring for their babies.

Olivia uttered, "Mothering and home study, house chores left me very exhausted; I was very tired. Sometimes I felt like giving up with this school thing till my baby was old enough to go to crèche, but I had to pull through it was very hard because I was always tired, and I didn't get enough sleep and it was

hard because I had to take care of my siblings do the home chores and take care of my baby. It made me feel like....it made me regret to keep the baby because.... the baby came at the wrong time if I may say cause it was tough dealing with COVID-19, trying to learn schoolwork and also try to feed a baby and raise it, it was hard plus my siblings, so it was hard”.



Thandi, aged 19



Thandi, aged 19

Talifhani said, *“Learning from home during lockdown wasn’t that hard because there were people who were taking care of her when I was studying. On the days that I was not going to school, like I would wake up and bath, bath the baby as well, make sure she has drunk milk then I would give her to the lady who was helping around the house. So that I can deal with the schoolwork that was assigned for me that day. Then when I am done I will take her back so the helper can continue with what she was busy with”.*

Prudence expressed, *“I had created a timetable for myself at home to study and for the baby. Though we didn’t have that much support from our teachers I managed to pass grade 9 and progressed to grade 10”.*

Coping strategies are a cognitive and behavioural effort made by individuals to deal with challenges presented by stressful situations (Nagar, 2021). The pandemic resulted in an increase in stress and a higher emotion-orientated coping (Nagar, 2021). Family and social support during the pandemic helped to reduce avoidance-orientated coping (Dändliker et al., 2022). Thus, by seeking social support, individuals can control negative emotions associated with stress and can engage in activities that alleviate stress. Those individuals who are confident using coping resources and have the ability to control the situation adopt problem solving strategies which reduce the main causes underlying stress (Nagar, 2021). The South African study by Ramoshaba and Kgarose (2021) for analysing coping strategies for online teaching and learning found that learners resorted to joining groups that share resources and consulted with teachers to overcome the challenges. Furthermore, this study revealed that some students dealt with challenges that they face in online teaching by asking for help from their families and using resources at home. The participants in this study were able to manage negative emotions such as fear and sadness and expressed positive ones (joy, enthusiasm and pride) in dealing with the situation of the pandemic (Bandura et al., 2003).

These made them to adopt positive and effective coping strategies and they were able to continue with home learning. Families and households can facilitate coping strategies that are used by teenage mothers, by supporting them (Baney et al., 2022).

Furthermore, social support seeking may result in shared caregiving for a new-born baby, and this may produce features which give young mothers the ability to maintain achievements and pursue activities. Families' reactions to the pregnancies ranged between anger and disappointment to abandonment, the silent treatment, and acceptance and forgiveness (Govender et al., 2020). The study by Hebron et al. (2021) found that the pandemic brought a serious mental problem including frustrations, stress, anxiety and depression into the life of teenage mothers. Nonetheless, the learners employed a variety of strategies to overcome the challenges they faced during online learning (Barrot et al., 2021). For instance, to address the home learning environment hitches, learners talked to their families, transferred to a quieter place and studied late at night. Despite various challenges and disruptions to continuing education some participants demonstrated educational resilience, maintaining motivation to study, adapting to online learning and capitalising on available resources and support (Duby et al., 2022). In this study teenage mothers who possessed positive emotional self-efficacy were able to express positive emotions when coping with learning challenges brought about by the pandemic.

4.2.2.6 THEME 6: LEARNING SUPPORT RECEIVED BY TEENAGE MOTHERS

This is the last broad theme that emerged from the study. The sub-themes emanated from the theme were parental, peer and teacher support.

4.2.2.6.1 Parental support

Parental involvement and support is very essential for home-based teaching and learning, especially during the COVID-19 lockdown. Parents play a crucial role in guiding their children because they are much needed to assist teachers especially during the pandemic but given the socioeconomic background and conditions of living these teenage mothers come from, it was not possible for some participants to receive such support. The study revealed that some participants reported to have received some assistance with schoolwork, access to the internet for online learning and parenting at home from parents and caregivers in order to continue with learning. Some parents were able to buy data bundles for access to schoolwork posted online and others were able to afford extra classes for teenage mothers to learn from home.

Bianca stated, *"It was alright, ai! Sometimes my parents would buy me data bundles other times not"*.

Violet said, *"My mother and neighbours assisted me with my homework. I was not afraid to contact corona because we used to sanitise and wear masks. I never thought of getting infected because I needed help. My father is working; he bought me data bundles to learn from home"*.

Rofhiwa stated, *"My parents were paying for extra classes"*.

This was supported by Bianca by saying, *"My grandmother took care of the baby so that I could learn"*.

Families and caregivers have become responsible for children's instruction in conjunction with virtual assistance (Munir, 2021). However, remote learning opportunities are not equitably available to all children. According to Munir (2020) not all households have the facilities and financial resources to carry out online learning and teaching, and all parents possess the skills and knowledge or even the will to assume the role of a teacher. It is not possible to teach all curricula remotely (Joile and Azoulay, 2020; Bangani, 2020). The COVID-19 pandemic has forced teachers and parents to quickly adapt to a new educational context: distance teaching and learning (Goudeau et al., 2021). Teachers developed online academic material while parents taught the exercises and lessons provided by teachers to their children at home (Goudeau et al., 2021). Support for studying from other people at home was an enabler for some participants' continuing education and not falling behind with schoolwork during school closures (Duby et al., 2022). The home-schooling requires parents to support the students' learning academically and economically (Porkhel and Chhetri, 2021). In the case of online learning in Bhutan, the majority of the learners are from rural villages where parents are mostly illiterate farmers (Porkhel and Chhetri, 2021).

Narratives of support for home studying from parents were from a minority of participants (Duby et al., 2022). In the context of the communities in which the study was conducted, given the socio-economic realities, low levels of literacy and education amongst parents are likely to have limited the potential for parents to assist with high-

school level assignments (Duby et al., 2022). Additionally, families and households were experiencing unprecedented hardships, unemployment and loss of income and assisting learners with their schoolwork may not have been a high priority. The support learners receive from members of their households has been identified as crucial in mitigating the negative impacts of school closures (Hoadley, 2020; World Bank, 2020). According to Ashani et al. (2022) teenagers growing up need social support from the family to shape themselves into better people. This support they receive from the family motivates them to change for a better future despite the stigma and discrimination they face from society (Ashani et al., 2022). Dändliker et al. (2022) indicated that adolescents' families may have been central sources of social support during the COVID-19 pandemic particularly during school closures. Regarding school closures, parents' reactions to the pandemic have shown to have an effect on adolescents' adjustment to online learning with less parental stress correlating with a more positive experience of adolescents' online learning during school closures (Dändliker et al., 2022).

The survey in England indicated that most parents of secondary school learners were struggling to provide home schooling, but still have the capacity to assist through access to technology, internet materials and private tutoring (Adediran, 2020). Some participants in this study were able to seek help from parents and neighbours for their schoolwork and this is a self-regulatory strategy.

4.2.2.6.2 Peer support

The study revealed that teenage mothers experienced social isolation and rejection from their peers at school during lockdown. Social isolation and rejection on these teenage mothers lead to them feeling unwanted and not accepted by their peers in school and the community which resulted in learners changing schools and repeating grades. This indicates that some participants experienced lack of peer support. The findings also revealed that some participants received support and help from peers regarding schoolwork during lockdown. This made a participant to be promoted to the next grade at school.

Thandi indicated that, *“Eish support! It was not there, I even decided to change schools because those people’s remarks and words kept crossing my mind saying, ‘you fell pregnant at a young age’ because if I change school people here won’t know that I have a baby, so that I can study that is why I managed to pass I am in grade 11”*.

Connie said, *“I felt great because at home I got assistance and my friends did not judge me, not talking about me behind my back”*.

This was supported by Olivia saying, *“Few of my friends were supporting me and that really helped me to cope. Uhm, some of my friends were able to help me, we used to study together sometimes, and my friends really helped me to cope with everything”*.

Peer support as one of the sources of social support, describes a variety of connections (e.g., emotional support or help-seeking) built with friends that have an influence on a person’s functioning (Dändliker et al., 2022). Several studies documented the benefits of friend support by showing that it is positively associated with social competence, higher self-esteem, lower depression and lower stress levels, higher self-regulation and better psychosocial mental health (Dändliker et al., 2022). A study by Liu et al. (2021b) found that female learners were better at self-regulation of their learning in an online environment. According to de la Fuente et al. (2021) female learners are generally more engaged in online teaching and learning and demonstrate a higher level of self-regulation and task-persistence when managing difficulties related to online studying. Additionally, female learners are more likely use various online tools to seek help from friends or peers during home learning. According to Fawaz et al. (2021) learners actively dealt with the situation by seeking help from their peers and relatives and engaging with recreational activities to cope with these problems (task load and confinement). Furthermore, female learners are more likely to use various online tools to seek help from friends or peers during home learning.

Mangeli et al. (2017) reflected that the adolescent mothers experience many challenges and among them are psycho-social challenges that may disrupt education. Therefore, the participants of this study also experienced immense social isolation and rejection. Sustainable Development Goal (SDG) 4 highlights equity and inclusion as guiding principles and as objectives in themselves, assuming that “no education target should be considered met unless met by all” (ECLAC/UNESCO, 2020).

The policy intention of leaving no one behind and the commitment to reach the most disadvantaged groups runs throughout the 2030 Agenda and holds promise to bring the poorest and most marginalised groups to the forefront of political decision-making, in an exercise of justice and redress for their historical subordinate status (Vargas, 2019). In the context of the pandemic, this mandate to prioritise the most disadvantaged groups is unavoidable, mainly to ensure that the current conditions of inequality do not worsen (ECLAC/UNESCO, 2020).

4.2.2.6.3 Teachers' support

The findings of the study revealed that some participants received support from teachers in the form of group chats from WhatsApp messenger through their smartphones during the coronavirus lockdown. Other participants reported that support from the school was not available and there was no platform to continue with learning during the pandemic. The study found that WhatsApp group chat was the online channel of communication most used by the participants and teachers for teaching and learning support and this platform was created for continuity of learning. Learners who needed clarity on certain questions they couldn't understand were assisted by the teachers on this platform.

Talifhani said, "We had a WhatsApp group chat with classmates so when there was something that you didn't understand you can put it on group chat and whoever did not understand would just explain. We had a separate group chat, the one that we were in with teachers only the teachers can post on them".

Olivia uttered, "Some of the teachers they created WhatsApp group for us, but it wasn't easy because I did not have a smartphone by that time".

Thandi stated, "If there was certain information that was posted on WhatsApp group I would then ask someone at school in the morning to update me with the work".

Prudence indicated that "Teachers did not assist us during lockdown, there was no platform to continue with learning".

Teacher support was particularly limited during lockdown, as many teachers had to adjust to their new roles including the application of new teaching technologies (Beteille et al., 2020; Moser et al., 2020). Face-to-face support from teachers was restricted in certain schools (Dändliker et al., 2022). Teachers and educational staff have had to face the demands of providing socio-emotional and mental health support to pupils and their families, which is an aspect of their work that has become increasingly important during the pandemic (ECLAC-UNESCO, 2020). The majority of teachers reported that they had been able to continue providing teaching and learning during the pandemic, that they had good contact with pupils and parents, and that 85% of municipalities in SA reported that they had been able to continue to provide a good and safe learning environment (Bubb and Jones, 2020). The AGYW who received support from teachers experienced fewer disruptions to their education and comprehend content satisfactorily (Duby et al., 2022). The COVID-19 pandemic has led to substantial changes and challenges in how teachers provide their students with much needed social interactions and emotional bonds during school closures (Ye et al., 2021).

Teacher support helps make learners feel secure and gives them confidence to be more active in school, socially as well as academically (Dändliker et al., 2022). Furthermore, teacher support may not only have been an important source for dealing with uncertainty about the academic situation. Research has shown that teacher support is indeed linked with the use of self-regulatory strategies and more prosocial behaviour (Dändliker et al., 2022). High support from teachers has shown to be beneficial for adolescents' engagement in remote learning during school closures (Bray et al., 2021). The South African DBE launched a complementary WhatsApp portal to provide teachers with information about COVID-19 and educational material (Jantjies, 2020). Moreover, the study further highlighted that those teachers shared the videos with parents through WhatsApp groups. Schools have created WhatsApp learning groups to take pictures of book pages and send them to parents, while learners receiving teaching material through their smartphone applications have enabled classes to continue (Jantjies, 2020).

A head teacher at a public school in a rural farming community in Zambia said teachers sent lessons through social media. However, not every child is linked on a social platform and, in particular, rural children have less access to mobile phones than children in urban areas (Human Rights Watch, 2020). A study conducted in London by Edwards (2020) revealed that more than half of the parents and caregivers reported that their children had not been contacted by the teachers during the school closures.

4.3 CHAPTER SUMMARY

This chapter presented, analysed and discussed generated data. The analysis process evolved reiteratively through a deductive process, reflecting on the study's main objectives and topics that emanated through reviewing of data. The main themes which emerged from the data were as follows: social disconnectedness, inability to cope with online learning, challenges experienced by teenage mothers, environment for home learning during lockdown, coping mechanisms used to learn during lockdown and learning support received by teenage mothers. The findings of the study were supported by the transcribed data and participatory arts. The following chapter deals with summary of findings, recommendations, conclusions and limitations of the study.

CHAPTER 5: SUMMARY OF FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

5.1 INTRODUCTION

Chapter 4 analysed the findings of the study, and data was discussed and interpreted according to the themes and sub-themes that emerged from the generated data. The participants' responses from semi-structured face-to-face interviews and participatory arts were analysed and discussed in the context of relevant literature related to the topic under the study. The current chapter provides an overview of the study, summary of findings, recommendations, conclusions, and limitations of the study.

5.2 OVERVIEW OF THE STUDY

The study was a qualitative, critical participatory action research (PAR). The community engagement approach was adopted by the researcher involving the participants collaboratively throughout the research process to achieve the objectives of the study. Semi-structured, in-depth face-to-face interviews were conducted with eleven (11) teenage mothers from rural areas of Makhado Municipality, Limpopo, who were recruited purposively and supplemented with snowballing. Additionally, participatory arts such as drawings and use of scrap papers were used to obtain in-depth data from participants. The interviews were conducted in Tshivenda and English and tape-recorded, and then transcribed verbatim and analysed. The duration of data generation was five months (from October 2022 to February 2023) to enhance prolonged engagement with the participants.

The researcher requested the assistance of an independent co-coder, and both the researcher and the co-coder accomplished an independent analysis. The researcher and co-coder held a consensus meeting to refine incongruities and identified the similarities (Fouché et al., 2021). The themes and sub-themes that emanated from the data were supplemented with literature related to the study. Trustworthiness of the participants' data was assured and using Lincoln and Guba (1985) cited in Polit and Beck (2020) and ethical considerations were adhered to in this study.

The study sought to describe and explore the teaching and learning coping strategies adopted by teenage mothers in the rural communities of Makhado Municipality during coronavirus lockdown in Limpopo, South Africa. This was done in order to provide recommendations which could be used to develop and review policies to address the learning challenges encountered by teenage mothers in schools. The goal was to provide the foundation for appropriate interventions, create social justice and strengthen equality to empower teenage mothers who are learners at rural community schools. The summary of findings and recommendations described below are positioned on the challenges and coping strategies of the eleven (11) participants, the research questions, the objectives and the themes originating from data analysis.

The study sought to answer the following questions:

- What were the teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown in the rural communities of Makhado Municipality in Limpopo, South Africa?
- Which teaching and learning coping strategies were successfully used by teenage mothers during coronavirus disease lockdown in the rural communities of Makhado Municipality in Limpopo, South Africa?

By responding to the above questions, the study attained the following objectives:

- To explore and describe the teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown in the rural communities of Makhado Municipality in Limpopo, South Africa.
- To describe the evidence of successful teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown in the rural communities of Makhado Municipality in Limpopo, South Africa.

5.3 SUMMARY OF THE FINDINGS

Six (6) themes, consisting of twelve (12) sub-themes emerged from the data analysis. The findings were discussed according to the following six themes:

THEME 1: Social disconnectedness

THEME 2: Inability to cope with online learning

THEME 3: Challenges experienced by teenage mothers

THEME 4: Environment for home learning during lockdown

THEME 5: Coping mechanisms used to learn during lockdown

THEME 6: Learning support received by teenage mothers

5.3.1 The themes and their implications

THEME 1: Social disconnectedness was experienced by teenage mothers in learning in rural communities in Makhado Municipality during the coronavirus lockdown. Teenage mothers experienced frustrations, struggled with self-directed learning, and experienced the feelings of shame and guilt. Stigma and discrimination in the community and school was also experienced by these mothers. The young mothers felt disheartened and discouraged to study on their own as it was difficult for them to get childcare relief. Learning from home was fraught with interruptions and distractions such as house chores and taking care of siblings. Some teenage mothers experienced humiliation, degrading remarks and judgement from schoolmates. Incidences of bullying, mocking and ridiculing by friends were noted from most participants who thus lost their connectedness with the community. The experience of being rejected, teased and labelled made participants feel that they were not accepted as being part of the community. One participant indicated that she had to change schools, hence she repeated a grade.

THEME 2: Teenage mothers were not able to cope with online learning as they could not afford data bundles as a result of financial constraints. Some participants did not have smartphones or laptops for learning. Accessing the learning activities posted on WhatsApp groups was also difficult. Some participants had to rely on their parents' gadgets which were not always accessible for them to do their schoolwork which in some cases resulted in infringement of parents' privacy.

The struggle to cope with online learning was a drawback on the progress of teenage mothers which was made prior to lockdown.

THEME 3: Challenges experienced by teenage mothers included increased level of stress caused by demands placed on them by home learning and caring for babies at the same time, as well as angry parents about the whole situation. Participants felt exhausted and discouraged to continue learning whilst at home; thus, a sense of giving up schooling ensued in most participants. The abovementioned feeling was exacerbated by the absence of their baby's father and lack of responsibility from him. Teenage mothers were lacking in most aspects, e.g., buying nappies, crèche fees, etc. Social grants were a source of income which was not enough to cater for all the needs of the babies.

THEME 4: Conducive learning environment with available resources exclusive of distractions and disruptions motivated the learners to learn on their own during challenging times of lockdown. Some teenage mothers were privileged to have a study table and enough space for learning. Some participants had access to smartphones, books and television for learning.

Although the environment was conducive to learning for some teenage mothers, it was not always the case for some participants as they experienced disturbances while studying at home. They had to juggle between schoolwork, house chores and giving their babies attention. Some participants had limited space for learning and unavailability of a study table and chair; they had to share the kitchen table with family members for other purposes.

THEME 5: Coping mechanisms used to learn during lockdown included waiting for babies to fall asleep, taking care of the siblings but had to pull through in order to progress with studies. Family members and caregivers offered child relief. Participants were positive and enthusiastic, as they had to develop a timetable for home learning and caring for their babies. Some participants were not coping due household errands which left them feeling very exhausted. They didn't have enough rest and sleep and felt pressure.

THEME 6: It was not possible for some participants to receive learning support given their socioeconomic background and conditions of living. Participants received some assistance from parents with schoolwork, and access to the internet for online learning. Some parents were able to buy data bundles and paid extra classes for teenage mothers to learn from home. Teenage mothers experienced social isolation and rejection from their peers which led to a feeling of not being accepted. Participants experienced lack of peer support. Some participants received learning support from teachers in the form of group chats from WhatsApp messenger, while others reported that there was no platform to continue with learning during the pandemic. WhatsApp group chat in this study seemed to be the dominant channel of communication used for home learning. Learners who needed clarity on certain activities were assisted by teachers on this platform.

5.4 CONCLUSIONS

Based on the findings the following conclusions were drawn:

It was concluded by the researcher that teenage mothers from low socioeconomic status did not have access to online learning resources such as smartphones, laptops, and internet bundles. Therefore, it was concluded that the COVID-19 pandemic has broadened the huge gap between the rich and the poor, urban and rural learners. The researcher learned that the WhatsApp messenger application seemed to be the most dominant source for teaching and learning in this study. Although some teenage mothers had television at home, they didn't have time to watch lessons because of house chores and caring for the baby and their siblings. The home environment for learning was not conducive as most teenage mothers didn't have a suitable study table and chair for schoolwork.

As concluded by the researcher there was evidence of social segregation and social injustice for teenage mothers in teaching and learning. Participants experienced physical (e.g., exhaustion, lack of rest and sleep) and mental health (internal stress) problems brought about by the pandemic. Participants also suffered emotional distress (e.g., embarrassment and humiliation) brought about by the stigma and discrimination

in the community as a result of being young mothers. Therefore, it was concluded that there was inconsistent support from teachers, parents, community members and the father of the baby.

Finally, it was concluded that coping strategies adopted by teenage mothers during the coronavirus disease lockdown in teaching and learning were the creation of time schedules for home learning and attending to the needs of the baby, and seeking for assistance from peers, parents, neighbours and teachers with schoolwork. Teenage mothers with high self-efficacy and self-regulatory skills developed resilience and stayed positive and motivated to continue with learning during challenging times. High self-efficacy has numerous benefits to daily life, such as pliability to adversity and stressful situations, healthy lifestyle habits and educational achievements (Lopez-Garrido, 2023). Teenage mothers who coped well with motherhood and learning on their own were able to progress to other grades in school.

5.5 RECOMMENDATIONS

Based on the findings and conclusions drawn from the study, recommendations are made under the following headings:

5.5.1 Policy making

Based on the findings of this study it is recommended that policy makers and health authorities and the Department of Education review their standard operating procedures and guidelines that govern teaching and learning in the country so as to benefit both urban and rural communities. These policies need to also support teenage mothers' teaching and learning without stigmatisation, discrimination and exclusion in schools. Kalb (2021) came to an agreement that teenage mothers need financial and educational support. The national budget allocated for teaching and learning should cater for the needs of teenage mothers living in rural communities. These include materials such as the availability of internet connectivity and low-cost tablets or smartphones to continue with learning for all learners in times of COVID-19 lockdown. Materials for teaching and learning should be distributed equally among learners including young learning mothers.

Sustainable Development Goal (SDG) 4 highlights equity and inclusion as guiding principles and as objectives in themselves, assuming that “no education target should be considered met unless met by all” (ECLAC/UNESCO, 2020). The policy’s intention of leaving no one behind and the commitment to reach the most disadvantaged groups runs throughout the 2030 Agenda and holds promise to bring the poorest and most marginalised groups to the forefront of political decision-making in an exercise of justice and redress for their historical subordinate status (Vargas, 2019). According to Soundien et al. (2021) COVID-19 has thus laid bare both the inequalities in provisions needed for learning from home such as funds, digital devices and data as well as disparity in how well teachers, learners, and parents have been equipped to continue with learning.

5.5.2 Nursing practice

It is recommended that school health professionals’ interventions should focus on promoting mental health and offer extensive psychological and social support to teenage mothers to be able to cope with schoolwork and mothering during a COVID-19 lockdown. The Department of Health and the Department of Social Development should assist to optimise the need for co-parenting between teenage mothers and their partners. Child support services should be strengthened by ensuring that the basic needs of children of teenage mothers are catered for to ease the burden faced by these young mothers.

5.5.3 Nursing education

It is recommended that the curricula should be developed in such a way that it is flexible and feasible to suit all learners in the country (SA) irrespective of their socioeconomic background. Authorities in education need to be geared to enriching social change towards transformative learning and address the issue of digital divide in rural communities. Educators should be trained with regard to information technology (other applications and social networks useful for teaching and learning e.g., Zoom and Microsoft teams) to assist them in offering effective and efficient online education. This was confirmed by Dube (2020) indicating that the education system must be aware of their teachers’ ability levels and should set expectations accordingly.

According to Dube (2020) workshops should be conducted online to equip teachers on the way to handle online learning.

5.5.4 Nursing research

It is imperative to note that the findings of this study are not generalised to all young learning mothers residing in Vhembe district, Makhado Municipality. For further research it is recommended that studies should be conducted in different provinces within South Africa as this could yield better results. This study is anticipated to serve as a point of reference for prospective researchers in nursing and public health to further conduct research for continued support of teenage mothers not coping in teaching and learning in the future pandemics. Since this study focused only on the teaching and learning coping strategies which were adopted by teenage mothers during COVID-19 lockdown, further studies should be conducted on challenges faced by learning mothers with regard to child support and relief.

5.6 LIMITATIONS OF THE STUDY

The present study was based on a small village and a convenient sample of learners in a deprived rural-based community in Vhembe district, Limpopo Province. Therefore, the study is limited in two ways, which are (a) the results do not necessarily reflect the opinions of all teenage mothers in the present location and (b) the findings may not be generalised to all underprivileged communities. However, the findings of this study may be generalised to the selected village under investigation in Makhado Municipality. Thoroughness is therefore required in interpreting the findings, including when the recommended measures are implemented elsewhere. A language barrier was experienced by the researcher when communicating with the participants, thus the translator assisted the researcher who was not that conversant with the Tshivenda language.

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APPENDIX A: INFORMATION SHEET FOR THE PARENT

09 June 2022

Greeting: Parent

My name is Shonisane Emily Moganedi I am a master's candidate studying at the University of KwaZulu-Natal, Howard College Campus. I can be contacted at: School of Nursing and Public Health, Howard College Campus, University of KwaZulu-Natal, Durban. Email: balshonisane@gmail.com , Cell: 082 0652 8480/065 6463 216.

Your child is being invited to consider participating in a study that involves research on teenage mothers and their coping strategies during coronavirus disease lockdown in 2020-2021. The aim of the study is to explore and describe the learning and teaching coping strategies adopted by teenage mothers in Makhado Municipality during coronavirus disease lockdown. The study is expected to enrol 20 teenage mothers in Makhado Municipality, Limpopo Province.

The study will involve face-to-face in-depth interviews, observations and recording of the interview with a voice recorder and notes will be taken during the process of data generation. The duration of your child's participation if she chooses to enrol and remain in the study is expected to be at least two months.

The study has no risks or discomforts anticipated though your child may experience feelings of embarrassment, shame, and shyness as she will be sharing her personal information. The study will create no direct benefits to her as a participant, but the findings may benefit other teenage mothers experiencing the same challenges in future pandemics.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number HSSREC/00004702/2022).

In the event of any problems or concerns/questions you may contact the researcher at Limpopo College of Nursing: Sekhukhune Campus in Glen Cowie. Cell phone

Number: 0820652848/0656463126, email: balshonisane@gmail.com or the Humanities and Social Sciences Research Ethics Committee contact details are as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001

Durban

4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557 - Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Your child's participation in this research is voluntary and she may withdraw at any point. In the event of refusal/withdrawal your child will not incur any penalty. Kindly inform the researcher through a text message or phone call should you wish to withdraw from the study.

The researcher may terminate the participant from the study should the participant be unavailable due to ill-health or not following the study procedures or give false information deliberately. Your child is not expected to pay anything and there will not be any disbursement for her participation in the study.

Neither the name nor identity of your child will be disclosed in any form in the study and in the publication of findings.

The records as well as other items associated with the interview will be held in a password-protected file accessible only the researcher and the supervisor. After a period of five years, in line with the rules of the university, it will be disposed by shredding and burning.

Supervisor:

Full Name: Dr. Mudau TS

University of KwaZulu-Natal

College: Health Sciences

Campus: Howard College

Desmond Clarence Building

Proposed Qualification: Independent study

Cell: 0738019094 Tel: 031 260 1433

Floor 4

APPENDIX B: DECLARATION OF CONSENT FOR THE PARENT

I ----- (*full names of parent/guardian*) have been informed about the study entitled Learning and teaching coping strategies adopted by teenage mothers during coronavirus disease lockdown in the rural areas of Makhado Municipality, Vhembe district, Limpopo Province by Shonisane Emily Moganedi.

I understand the purpose and procedures of the study.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my child's participation in this study is entirely voluntary and that she may withdraw at any time without being forced or threatened in any way whatsoever.

If I have any further questions/concerns or queries related to the study, I understand that I may contact the researcher at 0820652848/0656463126 or email: balshonisane@gmail.com

If I have any questions or concerns about my child's rights as a study participant, or if I am concerned about an aspect of the study or researcher then I may contact:

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Private Bag X 54001

Durban

4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557 - Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Supervisor:

Full Name: Dr. Mudau TS

University of KwaZulu-Natal

College: Health Sciences

Campus: Howard College

Desmond Clarence Building

Proposed Qualification: Independent study

Cell: 0738019094 Tel: 031 260 1433

Floor 4

I hereby provide consent to:

Audio-record my child's interview / focus group discussion YES / NO

Thank you for your contribution to this research.

Signature of Parent/Guardian

Date

Signature of Witness

Date

(Where applicable)

Signature of Translator

Date

APPENDIX C: INFORMATION SHEET FOR THE PARTICIPANT

Date: 09 June 2022

Greeting: Prospective Participant

My name is Shonisane Emily Moganedi I am a master's candidate studying at the University of KwaZulu-Natal, Howard College Campus. I can be contacted at: School of Nursing and Public Health, Howard College Campus, University of KwaZulu-Natal, Durban. Email: balshonisane@gmail.com , Cell: 082 0652 8480/065 6463 216.

You are being invited to consider participating in a study that involves research on teenage mothers and their coping strategies during the coronavirus disease lockdown in 2020-2021. The aim of the study is to explore and describe the learning and teaching coping strategies adopted by teenage mothers in Makhado Municipality during the coronavirus disease lockdown. The study is expected to enrol 20 teenage mothers in Makhado Municipality, Limpopo Province.

The study will involve face-to-face in-depth interviews, observations and recording of the interview with a voice recorder and notes will be taken during the process of data generation. The duration of your participation if you choose to enrol and remain in the study is expected to be at least two months.

The study has no risks or discomforts anticipated though you may experience feelings of embarrassment, shame, and shyness as you will be sharing your personal information. The study will create no direct benefits to you as participants, but the findings may benefit other teenage mothers experiencing the same challenges in future pandemics.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number HSSREC/00004702/2022).

In the event of any problems or concerns/questions you may contact the researcher at Limpopo College of Nursing: Sekhukhune Campus in Glen Cowie. Cell phone

Number: 0820652848/ 0656463126, email: balshonisane@gmail.com or the Humanities and Social Sciences Research Ethics Committee contact details are as follows:

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Durban

4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557 - Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Your participation in this research is voluntary and you may withdraw at any point. In the event of refusal/withdrawal you will not incur any penalty. Kindly inform the researcher through a text message or phone call should you wish to withdraw from the study. The researcher may terminate the participant from the study should the participant be unavailable due to ill-health or not following the study procedures or giving false information deliberately. You are not expected to pay anything and there will not be any disbursement for your participation in the study.

Neither your name nor identity will be disclosed in any form in the study and in the publication of findings.

The records as well as other items associated with the interview will be held in a password-protected file accessible only by the researcher and the supervisor. After a period of five years, in line with the rules of the university, it will be disposed by shredding and burning.

Supervisor:

Full Name: Dr. Mudau TS

University of KwaZulu-Natal

College: Health Sciences

Campus: Howard College

Desmond Clarence Building Floor 4

Proposed Qualification: Independent study

Cell: 0738019094 Tel: 031 260 1433

APPENDIX D: DECLARATION OF CONSENT FOR PARTICIPANT

I ----- (*full names of participant*) have been informed about the study entitled Learning and teaching coping strategies adopted by teenage mothers during coronavirus disease lockdown in the rural areas of Makhado Municipality, Vhembe district, Limpopo Province by Shonisane Emily Moganedi.

I understand the purpose and procedures of the study.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without being forced or threatened in any way whatsoever.

If I have any further questions/concerns or queries related to the study, I understand that I may contact the researcher at 0820652848/0656463126 or email: balshonisane@gmail.com

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or researcher then I may contact:

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Private Bag X 54001

Durban

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KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557 - Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Supervisor:

Full Name: Dr. Mudau TS

University of KwaZulu-Natal

College: Health Sciences

Campus: Howard College

Desmond Clarence Building Floor 4

Proposed Qualification: Independent study

Cell: 0738019094 Tel: 031 260 1433

I hereby provide consent to:

Audio-record my interview / focus group discussion YES / NO

Thank you for your contribution to this research.

Signature of Participant

Date

Signature of Witness
(Where applicable)

Date

Signature of Translator

Date

APPENDIX E: ASSENT FORM

Hello prospective participant.

I am doing a research study entitled “Learning and teaching coping strategies adopted by teenage mothers during coronavirus disease lockdown”. My name is Shonisane Emily Moganedi. A research study is a way to learn more about people. I want you to be part of my study. In my study I am going to ask you questions and I will audio record the interview and the research may be used for publications worldwide.

Are you happy or unhappy to be part of my study?

If you decide to be part of my study, you will be asked to sign a form of your free will. Your name will not be included in the study.

I, ----- (*full names of participant*), want to participate in this research study.

Signature of Parent/guardian

Date

Signature of Witness

Date

APPENDIX F: CONSENT REQUEST TO COMMUNITY LEADERS

P.O Box 2388

Jane Furse

1085

09 June 2022

The Honourable Chief

Tshilidzi village (pseudo name)

Re: Request for permission to access community members of Tshilidzi village in a participatory action research

I, Mrs S.E. Moganedi, have currently registered for study at the University of KwaZulu-Natal. The title of my study is, "Learning and teaching coping strategies adopted by teenage mothers during coronavirus disease lockdown in the rural communities of Limpopo".

I hereby request for your permission to access the community in partnership with the University in participatory action research. The study is aimed at exploring the experiences of teenage mothers during the lockdown period in SA and identifying related coping strategies through a collaborative approach. Furthermore, this will capacitate the community in solving identified problems among teenage mothers. Attached please find a copy of my research protocol. Data will be collected once ethical clearance to conduct the study has been granted by the University of KwaZulu-Natal Health and Social Sciences Research Ethics Committee.

Your permission in this regard will be greatly appreciated. Please feel free to contact me or my study supervisors should you need further clarity.

Yours faithfully

Researcher: Mrs S.E Moganedi 0820652848

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Supervisor:

Full Name: Dr. Mudau TS

University of KwaZulu-Natal

College: Health Sciences

Campus: Howard College

Desmond Clarence Building

Proposed Qualification: Independent study

Cell: 0738019094

Floor 4

Tel: 031 260 1433

APPENDIX G: INTERVIEW GUIDE

Tell me more about your experiences on teaching and learning during the coronavirus disease lockdown in South Africa

Probe to follow.

What were the challenges that you faced during online learning?

Probe to follow.

Tell me about the coping strategies that you adopted during coronavirus disease lockdown in South Africa.

Probe to follow.

Were you getting the assistance you needed with your schoolwork?

Probe to follow.

In what way has your academic work been impacted by the coronavirus disease pandemic?

Probe to follow.

How do you feel about the changes that have been brought about by the coronavirus disease? Have they had any impact on your mental health or well-being?

Probe to follow.

APPENDIX H: INVITATION TO PARTICIPATE IN THE RESEARCH

TITLE “Teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown”.

You are cordially invited to participate in the research study. The aim of the study is to explore and describe the teaching and learning coping strategies adopted by teenage mothers during the coronavirus disease lockdown. The researcher will conduct interviews as part of the research study to explore and describe the coping strategies. The interview will take around 45 minutes and is formal.

CRITERIA FOR POTENTIAL PARTICIPANTS

Teenage mothers aged between 13 and 19 who were enrolled in school during the 2020- 2021 academic years.

Kindly note that there is no payment for participating in this study. However, your participation will be a valuable addition to the study. Participation is completely voluntary, and you may withdraw from the study at any time. The study is completely anonymous; therefore, it does not require you to provide your name or any other identifying information. Teenage mothers who are interested and willing to participate may contact the researcher on these numbers: 0820652848/0656463126; email: balshonisane@gmail.com

Researcher: Moganedi S.E

TSHITENWA TSHA A: MAFUNGO BAMMBIRI KHA MUBEBI

Datumu: 09 June 2022

Ndumeliso: Vho lavhelelwaho nga u dzhenelela

Dzina langa ndi Shonisane Emily Moganedi. Ndi mugudiswa ane a khou ita masitasi kha Univesithi ya KwaZulu-Natala, Khampasini ya Kholidzhi ya Howard. Ndi nga kwamiwa: Tshikoloni tsha vhunese na Mutakalo wa Tshitshavha, Khampasini ya Kholidzi ya Howard, Univesithi ya KwaZulu-Natala, Debeni. Imeli: balshonisane@gmail.com, sele: 082 0652 848/ 065 6463 126.

Ni khou rambiwa uri ni dzhie ntha u dzhenelela kha ngodu dza thodisiso nga ha vhomme vha thangana ya murole (vhaswa) na ndila dze vha dzi ita u kona u ima nga tshifinga tsha “COVID-19” hu sa shumiwi nga 2020-2021. Ndivho ya u guda ndi u ita tshedzuluso na u talutshedza magudele na ndila dza mafunzele dze vhomme vha thangana ya murole (vhaswa) vha dzi shumisa nga COVID-19 Masipalani wa Makhado musi hu sa khou shumiwa. Ngudo khou lavhelelwa uri hu ñwalise vhomme vha thangana ya murole vha mahumimavhili (20) kha Masipala wa Makhado, Vhundu la Limpopo.

Ngudo i fanela u itwa hu tshi tou livhana tshifhatuwo nga tshifhatuwo nahone i itwe nga vhudziwa musi hu tshi khou itwa nyambedzano, u lavhelesa na u rekhoda maipfi a inthaviu na notsi dzi do vha dzi tshi khou ñwaliwa musi inthavhi ya murafho i ntshi khou ya phanda. Tshifhinga tshine na do tshi fhedza arali no nanga u diñwalisa nav ha henefha kha ngudo yeneyi ni khou lavhelelwa u vha hone lwa minwedzi mivhili (2).

Hei ngudo a i dzhenisi muthu khakhathini kana u vha na ndavhelelo ya u sa farea zwavhudi naho hu nauri ni do vha na tshenzhemo ya mpilaelo, u pfela vhutungu, na u shona ngauri ni do vha ni tshi khou amba nga vhupfiwa hanu. Hei ngudo, sa muthu we na didzhenisa khayoy, a n inga koni u vhona zwivhuya zwi daho kha inwi thwi, fhedza-ha zwe zwa waniwa zwi do thusa vhomme vha thangana-ya-murole (vhaswa) musi vha tshi do tangana na khaedu dza malwadze a angaredzaho shango lothe nga tshifhinga tshi daho.

Ngudo hei yo sedzuluswa kha masia othe yay a fhedza yo tendelwa nga vha komiti ya Thoduluso ya Saintsia ya Matshilisano ya Vhuthu UKZN.

(Tshivhalo tsha vhathu vho tendelwaho uri ngudo i gudiwe)

Arali hu thaidzo inwe na inwe/mbilaelo/mbudziso ni (vha) nga nkwama mutodulusisi kholidzini ya vhunese Limpopo: Khamphasini ya Sekhukhune ngei Glen Cowie. Nomboro ya lutingothendeleki/ lutingokhwalwa khai 082 0652 848/ 065 6463 126, Imeili: balshonisane@gmail.com kana Komiti ya Saintsia ya Matshilisana na vhuthu.

U kwamiwa nga vhudalo zwo ima nga ndila hei:

TSHODISISO YA NDAULO YA SAINTSIA MATSHILELE MATSHILISANO NA VHUTHU

Ofisi ya Thoduluso, Khampasini ya Westville

Zwifhatoni zwa Govan Mbeki

Phuraivete Bege x 54001

Debeni

4000

KwaZulu-Natala, Afurika Tshipembe

Lutingo: 27 31 260 4557- Fakisi: 27 31 260 4609

Imeili: HSSREC@ukzn.ac.za

U dzhenelela hanu kha hei thodisiso ndi u tou funa iwe mune, ni tshi funa ni nga litsha tshifhinga tshiñwe na tshiñwe. Arali ni sa funi/kana u litsha a ni nga wani ndatso. Arali ni tshi dotou litsha zwa u guda, divhadzani mutodisi nga ndlia yavhudi nga u tou mu rumela mulaedza lutingokhwalwa kana na tou mu founela. Mutodulisi a nga litshisa mudzheneleli kha ngudo, arali mudzheneleli a sa khou kona u vha hone nga mulandu wa mutakalo wawe une u si vhe wavhudi kana a sa khou tevhedzela maitele ane ngudo ya fanela u tshimbilisa zwone kana a tshi khou nea vutanzi vhutadzi ha u zwifha wo di imisela. Kha u dzhenelela hanu kha ngudo, inwi a ni khou lavhalelwa u do badela tshithu na tshithihi na hone a hunga todiwi tshelede na nthihi kha a dzhenelela havho. A honga dovha na u ambiwa ha madzina tha thoduluso idzo. Kha hei ngudo a hu nga

do vha na u buliwa dzina kana uri ndi nnyi nga ndila inwe kha u andadziwa ha mawanwa.

Dzirekhodo na zwinwe zwithu zwi elanaho na inthaviyu zwi do dzula kha faela ine ya vha na nomboro ya tshidzumbe yo tshireledzeaho ine ya kona u swikeliwa fhedzi nga mutodulusi na mutoli wawe. Nga murahu ha miñwaha mitanu, zwi tshi ya nga milayo ya yunivesithi faela i a bvisiwa ya kherukanyiwa ya fhedza ya fhiswiwa.

Mutoli/ Mulavhelesi (Supervisor)

Dzina nga vhudalo: Dr. Mudau T.S

Univesithi ya KwaZulu-Natala

Kholedzhi: Saintsia ya Mutakalo

Davhi: Kholedzi ya Howard

Tshifhato tsha Desmond Clarence

Ndalukano yo dzinginywaho: U guda wo diimisa u wotha.

Lutingothendeleki: 073 801 9094 Lutingo: 031 260 1433

Fuloro ya vhuna (4)

TSHITENWA TSHA B: KHWATSHISEDZO YA THENDELO

Nne..... (madzina a mudzheneleli nga vhudalo) ndo vhuziwa nga ha u guda, nga ha ndila dze vhomme vha thangana ya murole (vhaswa) vha dzi shumisa kha u funza na u guda uri vha kone u imedzana na nyimele ye vha tangana nayo nga tshifhinga tsha maga COVID-19 hu sa shumiwi mahayani, Masipalani wa Makhado, khaTshitiriki tsha Vhembe, Vhuduni la Limpopo nga Shonisane Emily Moganedi.

Ndi khou pfesesa ndivho na matshimbilele a ngudo.

Ndo fhiwa tshifhinga tsha u fhindula mbudziso nga ha ngudo, ndo pfa ndo fushea nga phindulo dze nda nea dzone.

Ndi khou khwathisedza la uri u dzenelela hanga kha hei ngudo ndi u tou funa na zwauri ndi nga di litsha tshifhinga tshiñwe na tshiñwe ndi so ngo tou kombetshedzwa kana u shushedziwa nga ndila iñwe na iñwe.

Arali ndi na dziñwe mbudziso/dzimbilaelo kana u tima-tima zwi elanaho na u guda, ndi pfesesa zwauri ndi nga kwama mutodisi kha 082 065 2848/ 065 646 3126 kana imeili: balshonisane@gmail.com.

Arali ndi na dziñwe mbudziso kana mbilaelo nga ha ndugelo dzanga dza u didzhenisa kha u guda kana arali ndi na mbilaelo dzi elanaho na tshipida tsha ngudo kana mutodisisi arali zwo ralo ndi nga kona u mukwama:

TSHODISISO YA NDAULO YA SAINTSI MATSHILELE MATSHILISANO NA VHUTHU

Ofisi ya Thoduluso, Khampasini ya Westville

Zwifhatoni zwa Govan Mbeki

Phuraivete Bege x 54001

Debeni

4000

KwaZulu-Natala, Afurika Tshipembe

Lutingo: 27 31 260 4557- Fakisi: 27 31 260 4609

Imeili: HSSREC@ukzn.ac.za

Mutoli/ Mulavhelesi (Supervisor)

Dzina nga vhudalo: Dr. Mudau T.S

Univesithi ya KwaZulu-Natala

Kholedzhi: Saintsi ya Mutakalo

Davhi: Kholedzi ya Howard

Tshifhato tsha Desmond Clarence

Ndalukano yo dzinginywaho: U guda wo diimisa u wotho.

Lutingothenleki: 073 801 9094 Lutingo: 031 260 1433

Fuloro ya vhuna (4)

Nne ndi khou disa thendelano kha:

Rekhodo ya u thetshesha inthaviyu yanga/ tshigwada tsho livhiwaho kha khaseledzo Ee/Hai

Vidio ya u rekhoda inthaviyu yanga/tshigwada tsho livhiwaho kha khaseledzo Ee/Hai

U shumiswa ha zwifanyiso zwanga kha ndivho ya thodisiso Ee/Hai

Ndivhuwo ya thusedzo yanu kha iyi thodisiso

Tsaino ya Mudzheneleli

Tsaino ya mutanzieli

(Kune zwa todea)

Tsaino ya mudologi

Datumu

Datumu

Datumu

TSHITENWA TSHA C: MAFUNGO BAMMBIRI KHA MUDZHENELELI

Datumu: 09 June 2022

Ndumeliso: Vho lavhelelwaho nga u dzhenelela

Dzina langa ndi Shonisane Emily Moganedi. Ndi mugudiswa ane a khou ita masitasi kha Univesithi ya KwaZulu-Natala, Khampasini ya Kholidzhi ya Howard. Ndi nga kwamiwa: Tshikoloni tsha vhunese na Mutakalo wa Tshitshavha, Khampasini ya Kholidzi ya Howard, Univesithi ya KwaZulu-Natala, Debeni. Imeli: balshonisane@gmail.com, sele: 082 0652 848/ 065 6463 126.

Ni khou rambiwa uri ni dzhie ntha u dzhenelela kha ngodu dza thodisiso nga ha vhomme vha thangana ya murole (vhaswa) na ndila dze vha dzi ita u kona u ima nga tshifinga tsha “COVID-19” hu sa shumiwi nga 2020-2021. Ndivho ya u guda ndi u ita tshedzuluso na u talutshedza magudele na ndila dza mafunzele dze vhomme vha thangana ya murole (vhaswa) vha dzi shumisa nga COVID-19 Masipalani wa Makhado musi hu sa khou shumiwa. Ngudo khou lavhelelwa uri hu nwalise vhomme vha thangana ya murole vha mahumimavhili (20) kha Masipala wa Makhado, Vhundu la Limpopo.

Ngudo i fanela u itwa hu tshi tou livhana tshifhatuwo nga tshifhatuwo nahone i itwe nga vhudziwa musi hu tshi khou itwa nyambedzano, u lavhelesa na u rekhoda maipfi a inthaviu na notsi dzi do vha dzi tshi khou nwaliwa musi inthavi ya murafho i ntshi khou ya phanda. Tshifhinga tshine na do tshi fhedza arali no nanga u di nwalisa nav ha henefha kha ngudo yeneyi ni khou lavhelelwa u vha hone lwa minwedzi mivhili (2).

Hei ngudo a i dzhenisi muthu khakhathini kana u vha na ndavhelelo ya u sa farea zwavhudi naho hu nauri ni do vha na tshenzhemo ya mpilaelo, u pfela vhutungu, na u shona ngauri ni do vha ni tshi khou amba nga vhupfiwa hanu. Hei ngudo, sa muthu we na didzhenisa khayoy, a n inga koni u vhona zwivhuya zwi daho kha inwi thwi, fhedza-ha zwe zwa waniwa zwi do thusa vhomme vha thangana-ya-murole (vhaswa) musi vha tshi do tangana na khaedu dza malwadze a angaredzaho shango lothe nga tshifhinga tshi daho.

Ngudo hei yo sedzuluswa kha masia othe yay a fhedza yo tendelwa nga vha komiti ya Thoduluso ya Saintsia ya Matshilisano ya Vhuthu UKZN.

(Tshivhalo tsha vhathu vho tendelwaho uri ngudo i gudiwe)

Arali hu thaidzo inwe na inwe/mbilaelo/mbudziso ni (vha) nga nkwama mutodulusisi kholidzini ya vhunese Limpopo: Khamphasini ya Sekhukhune ngei Glen Cowie. Nomboro ya lutingothendeleki/ lutingokhwalwa khai 082 0652 848/ 065 6463 126, Imeili: balshonisane@gmail.com kana Komiti ya Saintsia ya Matshilisana na vhuthu.

U kwamiwa nga vhudalo zwo ima nga ndila hei:

TSHODISISO YA NDAULO YA SAINTSIA MATSHILELE MATSHILISANO NA VHUTHU

Ofisi ya Thoduluso, Khampasini ya Westville

Zwifhatoni zwa Govan Mbeki

Phuraivete Bege x 54001

Debeni

4000

KwaZulu-Natala, Afurika Tshipembe

Lutingo: 27 31 260 4557- Fakisi: 27 31 260 4609

Imeili: HSSREC@ukzn.ac.za

U dzhenelela hanu kha hei thodisiso ndi u tou funa iwe mune, ni tshi funa ni nga litsha tshifhinga tshiñwe na tshiñwe. Arali ni sa funi/kana u litsha a ni nga wani ndatiso. Arali ni tshi dotou litsha zwa u guda, divhadzani mutodisi nga ndlia yavhudi nga u tou mu rumela mulaedza lutingokhwalwa kana na tou mu founela. Mutodulisi a nga litshisa mudzheneleli kha ngudo, arali mudzheneleli a sa khou kona u vha hone nga mulandu wa mutakalo wawe une u si vhe wavhudi kana a sa khou tevhedzela maitele ane ngudo ya fanela u tshimbilisa zwone kana a tshi khou nea vutanzi vhutadzi ha u zwifha wo di imisela. Kha u dzhenelela hanu kha ngudo, inwi a ni khou lavhalelwa u do badela tshithu na tshithihi na hone a hunga todiwi tshelede na nthihi kha a dzhenelela havho. A honga dovha na u ambiwa ha madzina tha thoduluso idzo. Kha hei ngudo a hu nga

do vha na u buliwa dzina kana uri ndi nnyi nga ndila inwe kha u andadziwa ha mawanwa.

Dzirekhodo na zwinwe zwithu zwi elanaho na inthaviyu zwi do dzula kha faela ine ya vha na nomboro ya tshidzumbe yo tshireledzeaho ine ya kona u swikeliwa fhedzi nga mutodulusi na mutoli wawe. Nga murahu ha miñwaha mitanu, zwi tshi ya nga milayo ya yunivesithi faela i a bvisiwa ya kherukanyiwa ya fhedza ya fhiswiwa.

Mutoli/ Mulavhelesi (Supervisor)

Dzina nga vhudalo: Dr. Mudau T.S

Univesithi ya KwaZulu-Natala

Kholedzhi: Saintsia ya Mutakalo

Davhi: Kholedzi ya Howard

Tshifhato tsha Desmond Clarence

Ndalukano yo dzinginywaho: U guda wo diimisa u wotha.

Lutingothendeleki: 073 801 9094 Lutingo: 031 260 1433

Fuloro ya vhuna (4)

TSHITENWA TSHA D: KHWATSHISEDZO YA THENDELO

Nne..... (madzina a mudzheneleli nga vhudalo) ndo vhuziwa nga ha u guda, nga ha ndila dze vhomme vha thangana ya murole (vhaswa) vha dzi shumisa kha u funza na u guda uri vha kone u imedzana na nyimele ye vha tangana nayo nga tshifhinga tsha maga COVID-19 hu sa shumiwi mahayani, Masipalani wa Makhado, khaTshitiriki tsha Vhembe, Vhuduni la Limpopo nga Shonisane Emily Moganedi.

Ndi khou pfesesa ndivho na matshimbilele a ngudo.

Ndo fhiwa tshifhinga tsha u fhindula mbudziso nga ha ngudo, ndo pfa ndo fushea nga phindulo dze nda nea dzone.

Ndi khou khwathisedza la uri u dzenelela hanga kha hei ngudo ndi u tou funa na zwauri ndi nga di litsha tshifhinga tshiñwe na tshiñwe ndi so ngo tou kombetshedzwa kana u shushedziwa nga ndila iñwe na iñwe.

Arali ndi na dziñwe mbudziso/dzimbilaelo kana u tima-tima zwi elanaho na u guda, ndi pfesesa zwauri ndi nga kwama mutodisi kha 082 065 2848/ 065 646 3126 kana imeili: balshonisane@gmail.com.

Arali ndi na dziñwe mbudziso kana mbilaelo nga ha ndugelo dzanga dza u didzhenisa kha u guda kana arali ndi na mbilaelo dzi elanaho na tshipida tsha ngudo kana mutodisisi arali zwo ralo ndi nga kona u mukwama:

TSHODISISO YA NDAULO YA SAINTSI MATSHILELE MATSHILISANO NA VHUTHU

Ofisi ya Thoduluso, Khampasini ya Westville

Zwifhatoni zwa Govan Mbeki

Phuraivete Bege x 54001

Debeni

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KwaZulu-Natala, Afurika Tshipembe

Lutingo: 27 31 260 4557- Fakisi: 27 31 260 4609

Imeili: HSSREC@ukzn.ac.za

Mutoli/ Mulavhelesi (Supervisor)

Dzina nga vhudalo: Dr. Mudau T.S

Univesithi ya KwaZulu-Natala

Kholedzhi: Saintsi ya Mutakalo

Davhi: Kholedzi ya Howard

Tshifhato tsha Desmond Clarence

Ndalukano yo dzinginywaho: U guda wo diimisa u wotho.

Lutingothenleki: 073 801 9094 Lutingo: 031 260 1433

Fuloro ya vhuna (4)

Nne ndi khou disa thendelano kha:

Rekhodo ya u thetshesha inthaviyu yanga/ tshigwada tsho livhiwaho kha khaseledzo Ee/Hai

Vidio ya u rekhoda inthaviyu yanga/tshigwada tsho livhiwaho kha khaseledzo Ee/Hai

U shumiswa ha zwifanyiso zwanga kha ndivho ya thodisiso Ee/Hai

Ndivhuwo ya thusedzo yanu kha iyi thodisiso

Tsaino ya Mudzheneleli

Datumu

Tsaino ya mutanzieli
(Kune zwa todea)

Datumu

Tsaino ya mudologi

Datumu

TSHITENWA TSHA E: FOMO YA THENDELANO LWA TSHIOFISI

Aa: Ndavhelelo ya mudzheneleli

Nne ndi ita thodisiso nga thoho ine ya ri u guda na u fundza nga ha ndila dze vhomme vha thangana-ya-murole (vhaswa) vha dzi shumisa uri vha kone u imedzana na nyimele ye vha tangana nayo nga tshifingha tsha maga a COVID-19 musi hu sa khou shumiwa. Dzina langa ndi pfi Shonisane Emily Moganedi. U guda nga u ita thodisiso, ndi ndila ya u guda zwinzhi nga ha vhathu. Ndi khou toda inwi ni tshi vha tshipida tsha ngudo yanga. Kha ngudo yanga, ndi khou do ni vhudzisa dzimbudziso nahone ndi do thetshesha ndi tshi khou rekhoda inthaviyu nahone i nga shumiswa kha u andadza lifhasi lothe.

Ni a zwi takalela kana a ni takaleli u vha tshipida tsha u guda?

Arali ni tshi khou elekanya u vha muñwe wa tshipida tsha ngudo yanga, ni do humbelwa u saina fomo zwi tshi bva kha Lufuno Iwanu inwi mune. Dzina lanu a li nga dzheniswi kha ngudo.

Nne..... (madzina nga vhudalo a mudzheneleli kha ngudo hei ya thodisiso).

Tsaino ya mubebi/ muundi

Datumu

Tsaino ya mutanzeili

Datumu

**TSHITENWA TSHA F: KHUMBELO YA THENDELO KHA
VHARANGAPHANDA VHA LUSHAKA**

P.O BOX 2388

Jane Furse

1085

25 July 2022

Mudi wa Tshilidzi (Dzina la si la vhukuma)

KHUMBELE YA THENDELO KHA MIRADO YA LUSHAKA LWA MUDI WA TSHILIDZI
U DZHENELELA KHA MUSHUMO WA THODISISO.

Nne Vho S.E Moganedi zwa zwino ndo diñwalisa kha u guda nga Yunivesithi ya KwaZulu-Natala. Thoho ya ngudo i ri “u guda na u funza nga ha ndila dze vhomme vha thangana-ya-murole (vhaswa) vha dzi shumisa uri vha kone u imedzana na nyimele ye vha tangana nayo nga tshifhinga tsha maga a COVID-19 musu hu sa shumiwi Limpopo, kha vhathu vha mahayani.

Nne ndo vha ndi tshi khou humbela thendelo kha vhone ya vhuledzani na vhathu vhavho musu Yunivesithi i tshi khou dzhenelela kha thodisiso. Ngudo yo livhiswa kha u ita thodisiso na u wanulusa tshenzhemo yo vhomme vha thangana-ya-murole vha i wana nga tshifhinga tsha musu hu sa khou shumiwa fhanu na u wana maitele e vha a shumisa uri hu kone u vha na u shumisana na vhana. Zwiñwe hafhu, hezwi zwi do ita uri vhomme vha thangana ya murole vha do kona u tandulula thaidzo dzo no wanulusiwaho. Ndi khou humbela uri kha vha wane khophi yanga yo nambatedzwaho afha ya thendelano ya u ita thodisiso. Mafhungo a do kuvhanganyiwa musu ho no wanala thendelo i bvaho kha komiti ya Thodisiso ya Saintsi ya Matshilele Matshisano na Mutakalo kha Yunivesithi ya KwaZulu-Natala.

Zwi do vha zwithu zwi takadzaho nga maanda arali hu tshi nga wanala thendelo kha haya mafhungo. Arali vha tshi todou nkwama, ngoho kha vha pfe vho vhofholowa kana vha kwama mutoli/mulavhelesi wanga arali vha tshi todou pfesesa.

Wavho a fhulufhedzo

Mutodisisi: Vho S.E Moganedi 082 065 2848/ 065 646 3126

TSHODISISO YA NDAULO YA SAINTSI MATSHILELE MATSHILISANO NA VHUTHU

Ofisi ya Thoduluso, Khampasini ya Westville

Zwifhatoni zwa Govan Mbeki

Phuraivete Bege x 54001

Debeni

4000

KwaZulu-Natala, Afurika Tshipembe

Lutingo: 27 31 260 4557- Fakisi: 27 31 260 4609

Imeili: HSSREC@ukzn.ac.za

Mutoli/ Mulavhelesi (Supervisor)

Dzina nga vhudalo: Dr. Mudau T.S

Univesithi ya KwaZulu-Natala

Kholedzhi: Saintsi ya Mutakalo

Davhi: Kholedzi ya Howard

Tshifhato tsha Desmond Clarence

Ndalukano yo dzinginywaho: U guda wo diimisa u wotho.

Lutingothendeleki: 073 801 9094 Lutingo: 031 260 1433

Fuloro ya vhuna (4)

TSHITENWA TSHA G: MATSHIMBIDZELWE A INTHAVIYU

Mmbudzeni nga vhudalo nga ha tshenzhemo yanu nga ha u funza na u guda tshifhingani tsha musu hu na maga a COVID-19 musu fhanu Afurika Tshipembe hu sa khou shumiwa.

Ha tevhela mbudziso dzi bvukulaho zwiñwe

Ndi dzifhio khaedu dze na tangana nadzo musu ni tshi khou guda hu tshi khou shumiswa lutingokhwalwa kana khomphiyutha?

Ha tevhela mbudziso dzi bvukulaho zwiñwe

Mmbudzeni nga ndila na maitele e na a shumisa nga tshifhinga tsha maga a COVID-19 fhanu Afurika Tshipembe musu hu sa shumiwi

Ha tevhela mbudziso dzi bvukulaho zwiñwe

No vha ni tshi wana thuso ine na toda kha mushumo wanu wa tshikolo?

Ha tevhela mbudziso dzi bvukulaho zwiñwe

Ndi masiandoitwa afhio e a vha hone kha mushumo wanu wa tshikolo, nga mulandu wa COVID-19 ine ya vha vhulwadze ho adamedzaho shango?

Ha tevhela mbudziso dzi bvukulaho zwiñwe

Ni di pfa hani nga ha tshanduko dze dza vha hone dzo disiwaho nga vhulwadze ha COVID-19? Dzo vhuya dza vha na masiandoitwa kha mutakalo wanu wa muhumbulo kana kha mutakalo wa muvhili wanu?

Ha tevhela mbudziso dzi bvukulaho zwiñwe

TSHITENWA TSHA H: THAMBO YA U DZHENELELA KHA THODISISO

THOHO: U FUNZA NA U GUDA NDILA DZE VHOMME VHA THANGANA-YA-MUROLE (VHASWA) VHA DZI SHUMISA URI VHA KONE NGA TSHIFHINGA TSHA MAGA A COVID-19 MUSI HU SA SHUMIWI

Vha khou rambiwa kha u dzhenelela kha ngudo ya thodisiso. Ndivho ya ngudo ndi ya u wanulusa na u talutshedza ndila dze vhomme vha thangana-ya-murole (vhaswa) vha dzi shumisa hau u funza na u guda ndila dze vha dzi shumisa uri vha kone u imedzana na yimele ye vha tangana nayo nga tshifhinga tsha maga a COVID-19 musi hu sa khou shumiwa. Mutodisisi u do itisa dziinthaviyu sa tshipida tsha ngudo ya thodusiso u wanulusa na u talutshedza ndila dze dza shumisa u kona u imedzana na nyimele. Inthaviyu i nga fhedza henefha kha miminetze ya mahumi mana na miminetze mitanu (45), nahone ndi ya tshiofisi.

THODEA DZA VHANE VHA NGA KONA U DZHENELELA

Vhomme vha vhana vha thangana-ya-murole (vhaswa) vhane vhana vhavho vha vha na

APPENDIX I: SAMPLE OF TRANSCRIPT (PARTICIPANT 7)

R: My name is Shonisane Moganedi I am a student at the University of Kwa-Zulu Natal doing a master's degree. My topic is coping strategies adopted by teenage mothers during teaching and learning in the time of the pandemic in the time of the lockdown. What is your name?

TM: My name is Thandi (pseudonym)

R: I am not going to use your real name. Your name will be Thandi.

TM: Okay

R: So, tell me, how was teaching, who was assisting you at home? Home learning

TM: Yoh, I tried my level best to study on my own, to be able to get high marks.

R: Was there anyone who could have assisted you at home?

TM: There was no one 'cause I don't stay with my mom

R: How many are you at home?

TM: When she is not around we are three (3)

R: Okay, meaning who?

TM: Myself and my younger brothers

R: And your baby?

TM: And my baby then we are four (4)

R: Oho, who was babysitting your baby?

TM: I took my baby to crèche when my mother was not home in the time when lockdown restrictions were eased

R: How did you pay fees for crèche?

TM: I used 'SASSA' (child grant) money to pay for crèche and the money that my mother sent I bought my child some of the items

R: Is your mother educated?

TM: No

R: She attended school till when?

TM: My mother attended school till grade 11 and she dropped out of school

R: What is she busy with at the moment?

TM: She is self-employed

R: Because we were all restricted to move out of our homes, how did she do that? Because we were not allowed to work during the hard lockdown? And other employers when you don't come to work you can't get paid?

TM: Yah

R: How did she manage?

TM: Eish! I don't know.

R: But she managed

TM: Yes, she made it possible that the money for my baby's food is available

R: So, how did you cope with home schooling and taking care of your baby? Breastfeeding, laundry, you know how the situation at home is.

TM: It was bad because the baby was crying a lot and I got disturbed with my schoolwork and that made me to fail at the end of the year and I repeated the grade

R: Oh, you failed because of these things?

TM: Yes, that is why at the end of the year I failed and repeated. Another reason why I failed and got demoralised is because people judged me as a teenage mother, and

I did not feel well because I didn't just swallow this baby. I know I did wrong to have a baby at a very young age, but I didn't swallow the baby, but people didn't accept my situation at school and my neighbours at home.

R: They looked at you somehow? Did they call you names?

TM: When I was passing they remarked by saying 'Aah this one with an abdomen'. The time I was pregnant when I approached them they would move away from me.

R: Okay, now I understand. And then your mother was she able to buy data bundles for your learning?

TM: No, I didn't have data bundles for my schoolwork. I tried to study on my own, but the baby disturbed me a lot and the bad treatment I have experienced from people negatively affected my ability to focus on schoolwork.

R: Mmm, support from the father of the baby?

TM: He was still a learner, even now he still is.

R: So, at school did you receive support for learning?

TM: Eish support! It was not there I even decided to change school, because those people's remarks and words saying 'you fell pregnant at a young age' kept crossing my mind because if I change school people here won't know that I have a baby, so that I can study that is why now I am in grade 11.

R: Oho, okay, so when you compare learning before corona and during the pandemic how was learning? What can you say about that? In terms of support, what is it that has changed?

TM: In the time of corona, it was worse because there was nothing that we could have learnt, it meant we had to study on our own with too much workload.

R: Was it even possible?

TM: It was not easy.

R: Were you able to visit your friends?

TM: I couldn't visit my peers for assistance with schoolwork, no one was available to take care of my baby, and I had to fetch her at the crèche after school. It meant I had to study on my own.

R: How was learning before and during the pandemic?

TM: The one before corona was alright because Mam was able to teach a lot of content in class and we learnt more. Then with this corona I had to study on my own, and the baby was bothersome and house chores were many.

R: So, then you said your siblings were young and you had to take care of them, so it means you took care of three (3) people here on top of that is studying. How did you cope with everything?

TM: Even if I had to take care of my younger brothers when my mom went to hustle. It was not that hard because they were not that young. They were in grade 4 and 7 doing their own schoolwork while I was busy with mine. The only challenge I experienced was only the baby because crèches were closed during lockdown I took my baby to someone in the village to look after her, so that I can attend school during rotation.

R: Didn't they bother you when you had to focus on your schoolwork?

TM: No, 'cause we had a schedule experienced for chores, the only challenge I was the baby, cause while I was busy with schoolwork, also they were busy with theirs.

R: Oho, did you take your baby to crèche during the time of corona?

TM: I took my baby to crèche when my mother was not home in the time when lockdown restrictions were eased.

R: Oho, there were no crèches around you?

TM: They were there but were closed.

R: Oho, closed because of corona?

TM: Ee

R: Okay, did you have a study table for learning?

TM: No, I just used anything, wherever I was.

R: Where exactly?

TM: Like my bed, I would just study.

R: Mm...mmm, did you have study materials?

TM: No, because some of the information was posted on WhatsApp group but I didn't even have a smartphone to study online. It was just a book only.

R: So, you didn't have a phone and some information was posted on WhatsApp?

TM: If there was certain information that was posted on WhatsApp group I would make sure that when I arrive at school in the morning to update me with the work.

R: Do you have a TV at home?

TM: Yes

R: Did they teach anything on TV, on other channels?

TM: I didn't check 'cause I didn't have time for TV, I just had only time for my books only.

R: But you knew about those lessons broadcasted on TV?

TM: Yes

R: Okay, your focus was too much on the baby?

TM: Yes

R: Oho, thank you

TM: Okay

APPENDIX J: UKZN INFORMED CONSENT CERTIFICATE



Zertifikat Certificat Certificado Certificate

Promouvoir les plus hauts standards éthiques dans la protection des participants à la recherche biomédicale
Promoting the highest ethical standards in the protection of biomedical research participants

Certificat de formation - Training Certificate

Ce document atteste que - this document certifies that

Shonisane Emily Moganedi

a complété avec succès - has successfully completed

Informed Consent

du programme de formation TRREE en évaluation éthique de la recherche
of the TRREE training programme in research ethics evaluation



Release Date: 2022/04/24
CID: mka1f8j3ka



Professeur Dominique Sprumont
Coordinateur TRREE Coordinator

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(SIWF - 20220217)

APPENDIX K: UKZN INTRODUCTION TO ETHICS CERTIFICATE



APPENDIX L: UKZN ETHICAL CLEARANCE



26 September 2022

Shonisane Emily Moganedi (222129274)
School of Nurs & Public Health
Howard College

Dear SE Moganedi,

Protocol reference number: HSSREC/00004702/2022

Project title: Teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown in Makhado Municipality, Limpopo province

Degree: Masters

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 05 September 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 26 September 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.

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

Yours sincerely,



Professor Dipane Hlalele (Chair)

/dd

Humanities and Social Sciences Research Ethics Committee


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

Telephone: +27 (0)31 260 8350/4557/3587 Email: hssrec@ukzn.ac.za Website: <http://research.ukzn.ac.za/Research-Ethics>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

INSPIRING GREATNESS

APPENDIX M: PERMISSION TO ACCESS COMMUNITY MEMBER

	<h1>Ravele Traditional Leadership</h1>	<p>P.O. Box 15, Mungomani 0992 Rd 3668, No. 30013, Mauluma, Makhado, Vhembe Limpopo province, South Africa</p>
Enquiries: Mobile: E-mail: Ref:	Vhavenda Vho – Ravele M.N +27813006142 +27766217855 ramaanrr@gmail.com RAV/ADE/Dr Mudau, TS-Ukzn/Research Study2022	
		24 th August 2022

Moganedi Shonisane Emily, Student no. 2221129274
University of Kwazulu – Natal
E-mail: balshonisane@gmail.com
Supervisor: Dr. Mudau T.S

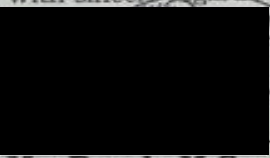
Dear Madam

REQUEST FOR PERMISSION TO ACCESS COMMUNITY MEMBERS OF MAULUMA VILLAGE IN A CRITICAL PARTICIPATORY ACTION RESEARCH USING UNIVERSITY ENGAGEMENT APPROACH.


TITLE OF PROJECT: "Teaching and learning coping strategies adopted by teenage mothers during the coronavirus disease lockdown in the rural communities in Makhado municipality, Vhembe district"


1. The above matter bears reference.
2. We acknowledge receipts of your letter of request for permission to conduct the above-mentioned research study project on; *"Teaching and learning coping strategies adopted by teenage mothers during the coronavirus disease lockdown in the rural communities in Makhado municipality, Vhembe district"*.
3. Subsequent to receipt of the afore-said application, careful perusal and deliberation by our Royal Council and our Traditional Leader has resulted in granting you access permission to undertake such a critical research study.
4. We are therefore pleased to inform you that this application has been granted and approved; effective as from the 25th August 2022.
5. We are wishing you success in your effort to undertake appropriate, credible and competent research study in our community.

With sincere regards


.....
al Council
.....

Mr. Ravele M.G
Deputy Chairperson:
Ravele Royal Council

Date: 

Date: 

Approval:
Khosi Vho – Ravele R.R
Traditional Leader

RAVELE COMMUNITY – MAULUMA / BAROTTA / DIVHANI / TSWIME PARK
We Are Developing Our People While Preserving Food Security, Nature, Culture, Heritage, Values & Livelihoods

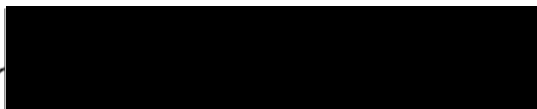
APPENDIX N: EDITOR'S LETTER

8 Nahoon Valley Place
Nahoon Valley
East London
5241
17 May 2023

TO WHOM IT MAY CONCERN

I hereby confirm that I have proofread and edited the following thesis using the Windows 'Tracking' system to reflect my comments and suggested changes for the student to action and produce a final correctly written document:

Teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown in Makhado Municipality, Limpopo Province, by SHONISANE EMILY MOGANEDI, a research study submitted in fulfilment of the requirements for the Master of Nursing Degree in the Discipline of Nursing at the School of Nursing and Public Health, College of Health Sciences, University of KwaZulu-Natal.



Brian Carlson (B.A., M.Ed.)
Professional Editor

Email: bcarlson521@gmail.com

Cell: 0834596647

Disclaimer: Although I have made comments and suggested corrections, the responsibility for the quality of the final document lies with the student in the first instance and not with myself as the editor.

APPENDIX O: CO-CODING CERTIFICATE



8/24/2023

To Whom It May Concern,

CO-CODING VERIFICATION

The dissertation "*Teaching and learning coping strategies adopted by teenage mothers during coronavirus disease lockdown*" by Shonisane Emily Moganeli has been co-coded to identify recurring themes in the data analysis by me.

Please note that no view is expressed regarding the document's subject-specific technical content or changes after the initial co-coding process and after this letter's date.

Kind regards,



Fumane P. Khanare (PhD)
BEd Honours in Educational Psychology Coordinator (University of Johannesburg)
PhD (Educational Psychology), Nelson Mandela Metropolitan University
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BEd Hons (Educational Psychology) (Cum Laude), University of Kwa-Zulu Natal