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**EXPLORING STUDENT TEACHERS' RESILIENCE ON TEACHING PRACTICE IN  
THE COVID-19 ERA IN MASVINGO DISTRICT, ZIMBABWE**

**By**

**MARENENYA MARVELOUS**

**CE (Morgenster Teachers' College), BSc PSY (ZOU), BSc Hon PSY (ZOU), Med Ed PSY  
(GZU)**

*Submitted in fulfillment of the requirements in respect of the doctoral degree qualification  
Philosophiae Doctor in Education Psychology*

*in the*

**SCHOOL OF EDUCATION STUDIES**

**FACULTY OF EDUCATION**

*at the*

**UNIVERSITY OF THE FREE STATE**

**BLOEMFONTEIN**

**November 2023**

**Supervisor: Dr K R Mukuna**

## DECLARATION

I, the undersigned, sincerely declare that this thesis entitled **EXPLORING STUDENT TEACHERS' RESILIENCE ON TEACHING PRACTICE IN THE COVID-19 ERA IN MASVINGO DISTRICT, ZIMBABWE** submitted in fulfillment of the degree Philosophiae Doctor is original and entirely my own work except where other sources have been acknowledged. I also certify that this thesis has not previously been submitted at this or any other faculty or institution.

I do hereby cede copyright of this thesis in favor of the University of the Free State.

Signature



Date 12 October 2023

Marvelous Marenzenya

Bloemfontein

November 2023

## **DEDICATION**

This thesis is dedicated to the memory of my parents Alpheus Bikai Marenzenya and Jerina Marenzenya who always believed in my ability to be successful in the academic arena. You are gone but, your belief in me has made this journey possible.

## **ACKNOWLEDGEMENTS**

I wish to acknowledge individuals and institutions that supported, assisted and guided me throughout this study.

First and foremost, my profound gratitude and heartfelt appreciation go to my supervisor, Dr Kananga Robert Mukuna. He guided and worked tirelessly to see to it that this study came to fruition. Thank you for your expert guidance, patience, suggestions, timeous feedback, support and continuous encouragement, which developed in me the capacity for resilience to soldier on. I would also like to thank my supervisor for arranging funding for my studies. As such, my heartfelt appreciation goes to the University of the Free State for funding my studies during the three years of my study.

I would also like to thank Ministry of Primary and Secondary Education (MoPS) for granting me permission to undertake my fieldwork in primary schools in Masvingo District, Zimbabwe.

To Dr. Davis Zireva, Dr. Khama Mushuro, Mr. Tapiwa Frank Mudzingwa and Mr. Godfrey Tadzembwa, I appreciate your unwavering moral and instrumental support, I sincerely thank you.

My profound gratitude goes to the twenty-one (21) student teachers and six (6) student teachers' mentors who participated in the focus group discussions and interviews despite the COVID-19 pandemic. I cannot find adequate words to express my thankfulness, for without you and your invaluable contributions, I would not have completed this study.

My sincere gratitude to Miss Ratidzo Mataruse, Mr. Simba Tachiveyi and Mr. Tungamirai Matema for assisting me where ICT skills were paramount. Special thanks go to Dr Vincent Jenjekwa for his editorial work.

Lastly, my deepest gratitude is directed towards my wife Ndanatsiwa Marenyenya and children, Handsome Marenyenya and Vimbai Marenyenya, for their support throughout my study. Without their encouragement, it would not have been easy to maneuver through the scholarly path.

To you all I say may our dear almighty God shower you with abundant blessings.

## **LIST OF ABBREVIATIONS**

ARRSSO: Adversity/Risk Support Strategies Outcome.

BSc PSY: Bachelor of Science Degree in Psychology.

BSC Hon PSY: Bachelor of Science Honours Degree in Psychology.

CE: Certification in Education

COVID-19: Coronavirus discovered in 2019 is an infectious disease caused by SARS-CoV-2 virus i.e., SARS – severe acute respiratory syndrome.

FAREME: Family Religion and Moral Education.

GZU: Great Zimbabwe University

HSS: Heritage Social Studies.

Med Ed PSY: Master of Education in Educational Psychology.

TP: Teaching Practice

VPA: Visual and Performing Arts.

ZOU: Zimbabwe Open University

3-3-3: three terms in college, three terms out on teaching practice, three terms in college.

## **ABSTRACT**

This study aimed to explore student teachers' resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe. More specifically, the study was intended to gain insights into the major teaching practice COVID-19 induced teaching practice stressors, factors that hinder the resilience of student teachers on teaching practice during the COVID-19 era, personal and contextual resources that contribute to resilience outcomes in student teachers on teaching practice in COVID-19 era and support student teachers receive on teaching practice in the COVID-19 era. This research study contributes new knowledge to the ongoing discourses about student teachers' resilience on teaching practice in COVID-19 era. In order to explore student teachers' resilience on teaching practice in COVID-19 era, the study employed a qualitative social constructivist approach through a phenomenological research design. Data were generated through focus group discussions and in-depth semi-structured interviews. One teachers' college was conveniently sampled, and twenty-one (21) student teachers and six (6) student teachers' mentors were purposively sampled from three primary schools in Masvingo District, Zimbabwe. Data were analyzed using the thematic content analysis approach.

The thematic findings revealed that student teachers on teaching practice in the COVID-19 era are subjected to teaching practice stressors induced by the COVID-19 pandemic such as fear of contracting the COVID-19 virus, illness, isolation, stigmatization and death, anxiety, uncertainty, hopelessness, economic hardships, prolonged teaching practice period, school closures, transference of face-to-face teaching to online learning. It emerged from this study that lack of teaching competences, poor relationships, behavioral problems, class and classroom management, work overload and teaching practice supervision hinder the resilience of student teachers on teaching practice in the COVID-19 era. This research uncovered that personal and contextual resources promote resilience in student teachers on teaching practice in COVID-19 era. The study established that contextual support from stakeholders cultivates the resilience of student teachers' resilience in teaching practice during the COVID-19 pandemic. Finally, thematic results revealed that the capacity for resilience can be developed during initial teacher preparation, so the study recommends that the teacher education curriculum include a resilience subject. Hence, a pre-service teacher resilience conceptual model is proposed as a guideline for stakeholders involved in pre-service teacher education to develop capacity for resilience in student teachers' teaching practice.

## Table of Contents

<b>DECLARATION</b> .....	i
<b>DEDICATION</b> .....	ii
<b>ACKNOWLEDGEMENTS</b> .....	iii
<b>LIST OF ABBREVIATIONS</b> .....	iv
<b>ABSTRACT</b> .....	v
<b>List of Figures</b> .....	x
<b>List of Tables</b> .....	xi
<b>List of Appendices</b> .....	xii
<b>CHAPTER 1</b> .....	1
<b>GENERAL INTRODUCTION</b> .....	1
1.1 Introduction.....	1
1.2 Background to the study .....	1
1.3 Statement of the problem.....	4
1.4 The main research question.....	6
1.5 Aim and objectives of the study .....	7
1.5.1 Aim of the study .....	7
1.5.2 Research objectives.....	7
1.6 Theoretical Framework.....	7
1.7 Summary of the research methodology .....	9
1.7.1 Research approach.....	9
1.7.2 Research Paradigm.....	9
1.7.3 Research design.....	10
1.7.4 Data collection tools .....	10
1.7.5 Mechanisms for selection of participants .....	12
1.8 Data analysis, interpretation, reporting and quality assurance.....	13
1.9 Trustworthiness.....	14
1.10 Significance of the study .....	15
1.11 Limitations of the study .....	16
1.12 Demarcation of the study .....	17
1.12.1 Conceptual demarcation.....	17
1.12.2 Geographical demarcation.....	17
1.13 Ethical considerations .....	18

1.14 Definition of key terms .....	19
1.14.2 COVID-19.....	19
1.14.7 Teacher Resilience.....	21
1.14.8 Teaching Practice .....	22
1.15 Thesis outline.....	22
Chapter 1: The problem and its setting.....	22
Chapter 2: Review of related literature.....	23
Chapter 3: Research Methodology.....	23
Chapter 4: Data presentation, analysis and discussion.....	23
Chapter 5: Conclusions and recommendations.....	23
1.16 Summary.....	24
<b>CHAPTER 2.....</b>	<b>25</b>
<b>LITERATURE REVIEW .....</b>	<b>25</b>
2.1 Introduction.....	25
2.2.2 Conceptualizing Teacher Resilience.....	29
2.2.4 Notion of Teaching Practice.....	32
2.2.7 Teaching Practice in Zimbabwe.....	36
2.5.2 Views on personal and contextual factors that promote teacher resilience.....	54
2.5.5 Strategies that promote resilience.....	59
2.5.6 Resilient outcomes.....	60
2.5.9 Process-Focused Perspectives.....	68
2.5.11. System-Focused Perspective of resilience.....	72
2.6.1 Support from school administrators.....	77
2.6.2 Support from mentors.....	78
2.6.3 Collegial support.....	79
2.7 Theoretical Framework.....	81
2.7.1 The importance of a theoretical framework.....	81
2.7.3 Historical development of the resilience theory.....	83
2.8 SUMMARY.....	90
<b>CHAPTER THREE.....</b>	<b>91</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>91</b>
3.1 Introduction.....	91
3.2 Setting of the study.....	91

3.3 Research questions .....	92
3.3.1 Sub-research questions.....	92
3.6 Research Paradigm .....	96
3.7 Research design.....	98
3.8 Data Collection Methods .....	100
3.8.1 Instrumentation.....	101
3.8.2 Pilot Study .....	101
3.8.3 Semi-structured interviews .....	102
3.8.4 Focus Group Discussions .....	104
3.9 Mechanism for selection of participants .....	105
3.9.1 Population .....	105
3.9.2 Sample and Sampling Methods .....	106
3.9.3 Sampling a Teachers' College .....	106
3.9.4 Sampling schools, student teachers' mentors and student teachers .....	107
3.9.5 Sample size.....	108
3.10 Data analysis, interpretation, reporting and quality assurance.....	109
3.10.1 Data analysis and presentation .....	109
3.10.2 Trustworthiness.....	111
3.10.3 Dependability .....	111
3.10.4 Credibility.....	111
3.10.5 Transferability .....	112
3.10.6 Confirmability .....	113
3.10.7 Authenticity.....	113
3.11 Ethical Considerations .....	114
3.11.1 Permission .....	114
3.11.2 Informed Consent.....	115
3.11.3 Confidentiality and anonymity.....	116
3.11.4 Non-maleficence.....	116
3.12 Summary .....	116
<b>CHAPTER FOUR.....</b>	<b>118</b>
<b>DATA ANALYSIS, PRESENTATION AND DISCUSSION.....</b>	<b>118</b>
4.1 Introduction.....	118
4.1.2 Identification coding for the focus group discussions and semi-structured interviews .....	120

4.3 PRESENTATION OF THE RESULTS AND THE FINDINGS OF THE STUDY .....	124
4.3.1 Theme 1: COVID-19 induced teaching practice stressors. ....	124
4.3.2 Sub-theme 1.1: Impact of COVID-19 on teaching practice span.....	125
4.3.3 Sub-theme 1.2: Risks associated with COVID-19 on student teachers on teaching practice. ....	127
4.3.4 Sub-theme 1.3 Pedagogy in COVID-19 era .....	130
4.3.5 Sub-theme 1.4 Effects of lockdowns and school closures.....	137
4.3.6 Sub-theme 1.5 State of preparedness for schools re-opening.....	142
4.3.7 Discussion of findings of Theme 1 .....	145
4.4 Theme 2: Factors that hinder resilience of student teachers on teaching practice in the COVID-19 era.....	153
4.4.2 Sub-theme 2.2: Poor relationships.....	157
4.4.3 Sub-theme 2.3: Threats to student-teacher resilience.....	164
4.4.3.1 Behaviour Problems .....	165
4.4.4 Sub-theme 2.4: Teaching Practice supervision .....	172
4.4.5 Discussions of Findings of Theme 2.....	179
4.5 Theme 3: Personal and contextual resources that contribute to resilience outcomes in student teachers on teaching practice in COVID-19 era.....	184
4.5.1 Sub-theme 3.1: Personal resources .....	185
4.5.2 Sub-theme 3.2: Relational resilience as contextual resource.....	198
4.5.3 Sub-theme 3.3: Coping strategies .....	210
4.5.4 Discussions of Findings of Theme 3.....	213
4.6 Theme 4: Support student teachers receive on teaching practice in the COVID-19 era...222	
Table 4.6.1 gives an overview of Theme 4 and its sub-themes .....	222
4.6.1 Sub-theme 4.1: Contextual support.....	222
4.6.2. Sub-them 4.2: Expected support .....	236
4.6.3 Sub-theme 4.3: Developing capacity for resilience in student teachers. ....	239
4.7 Discussions of findings of Theme 4 .....	243
4.7.1 Contextual support. ....	243
4.7.2 Developing capacity for resilience in student teachers.....	247
4.8 Summary.....	248
<b>SUMMARY, FINDINGS, RECOMMENDATIONS AND CONCLUSIONS .....</b>	<b>250</b>
5.1 Introduction.....	250
5.2 Overview of the study.....	250
5.3 Findings of the study.....	252

5.3.1. Response to research question 1: What are the major COVID-19 induced teaching practice stressors in Masvingo District, Zimbabwe? .....	252
5.3.2. Response to research question 2: What are the factors that hinder resilience of student teachers on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe? .....	255
5.3.3. Response to research question 3: What personal and contextual resources contribute to resilience outcomes in student teachers on teaching practice in COVID-19 era in Masvingo District, Zimbabwe? .....	258
5.3.5 Response to research question 4: What kind of support do student teachers on teaching practice receive in the COVID-19 era in Masvingo District, Zimbabwe.....	264
5.4 Summary of main findings .....	268
5.4.1 A model of Pre-service Teacher Resilience .....	275
5.5 Limitations of the study .....	281
5.6 Contribution of the study .....	281
5.7 Recommendations.....	282
5.10 Concluding remarks.....	286

## List of Figures

	page
Figure 2.2      Conceptual framework	27
Figure 2.2.1    Elements involved in resilience	29
Figure 2.2.3    The teacher resilience process	31
Figure 2.2.6    Teaching Practice Triad	35
Figure 2.5.1    A model of early career teacher resilience	54
Figure 2.5.2.1   A systemic view of resilience	56
Figure 2.5.11.2 Bronfenbrenner’s Ecological Model	74
Figure 5.4.2    A model of Pre-service Teacher Resilience	284

## List of Tables

	page	
Table 2.4.1	Individual and contextual risk factors that hinder resilience	45
Table 2.4.2	Risk factors that hinder resilience	47
Table 2.4.3	Challenges of early career teachers	48
Table 2.5.2	Personal and Contextual factors related to resilience	57
Table 2.5.7	Individual and contextual protective factors for student teacher resilience	61-62
Table 2.5.8.5	Dimensions and aspects of resilience	68
Table 2.5.9.1	Early career teacher responses to challenges by dimension of resilience	70
Table 3.4	Overview of the research methodology	94-95
Table 3.9.1	Population	107
Table 4.1.1	Coding for excerpts that emanated from the focus group discussion and semi-structured interviews	120
Table 4.1.2	Outline of codes for focus group discussion participants	121
Table 4.1.3	Outline student teachers' mentors semi-structured interview participants	122
Table 4.1.4	Outline student teachers' semi-structured interview participants	123
Table 4.2	Outline of themes, sub-themes and categories.	124-125
Table 4.3.1	Outlines Theme 1 and its sub-themes	126
Table 4.4.1	gives an overview of Theme 2 and its sub-themes	156
Table 4.5.1	gives an overview of Theme3 and its sub-themes	187
Table 4.6.1	gives an overview of Theme 4 and its sub-themes	224

## **List of Appendices**

APPENDIX A:	Ethical Clearance letter from the University of the Free State	320
APPENDIX B:	Letter of Approval from Ministry of Primary and Secondary Education	321
APPENDIX C:	Letter of Approval from the Provincial Education Director (Masvingo Province)	322
APPENDIX D:	Letter of Approval from the Provincial Education Director (Masvingo District)	323
APPENDIX E:	Invitation letter for student teachers' mentors	325
APPENDIX F:	Invitation letter for student teachers	326
APPENDIX G:	Consent form	328
APPENDIX H:	Interview Protocol for student teachers' mentors	330
APPENDIX I:	Interview Protocol for student teachers	334
APPENDIX J:	Focus Group Discussion Protocol for student teachers	338
APPENDIX K:	Proofreading and Editing Certificate	341

# CHAPTER 1

## GENERAL INTRODUCTION

### 1.1 Introduction

This chapter primarily serves as an introduction and provides a framework for the study. It elucidates the study's background, problem statement, and the theoretical framework that underpins the study. It also presents the research questions, aims, objectives, and the methodology employed in the research, including the mechanisms for participant selection, data analysis, and interpretation. Furthermore, it discusses the study's significance, its limitations, delimitations, and ethical considerations. The chapter concludes by clarifying concepts related to the resilience of student teachers during teaching practice in the COVID-19 era and provides an outline of the thesis organization.

### 1.2 Background to the study

In Zimbabwe, teaching practice is a crucial component of the teacher education programme in higher education institutions. It serves as a vital platform for the professional development of pre-service teachers (Moyo, 2020; Flores, 2016; White, & Forgasz, 2016). There are 18 primary school teacher training colleges in Zimbabwe, affiliated with the University of Zimbabwe, offering a pre-service Diploma in Education (Primary).

The diploma programme follows a 3.3.3 training model, where student teachers spend three terms on teaching practice (Chivore, et al., 2015, Mavhundutse, et al., 2014). The first year is an academic residential phase in college, followed by a year of teaching practice, and finally another year in college where student teachers reflect on their experiences. To meet the standards for qualified teachers in Zimbabwe, it is mandatory for student teachers to undertake Teaching Practice for three terms (Mavundutse et al, 2014).

The primary goal of teaching practice is to introduce student teachers to the teaching profession and prepare them for it (Ntsaluba & Chireshe, 2013). College lecturers and external assessors from the University of Zimbabwe supervise and evaluate the student teachers' overall performance during their teaching practice (Konyana & Motalenyane, 2022). At the end of the

teaching practice period, external assessors from the Department of Teacher Education at the University of Zimbabwe examine the student teachers (Chivore, et al., 2015).

However, the COVID-19 pandemic, declared in March 2020, posed significant challenges to this component of the programme. With schools closed for five months from 24 March 2020, unlike the theoretical component which could be completed through e-learning, teaching practice, being a practical task, had to be carried out in an actual classroom (Moyo, 2020). By April 15, 2020, about 1.5 billion students in 195 countries, from pre-school to higher education, were affected by repeated lockdowns (UNESCO, 2020). The United Nations Secretary-General, Antonio Guterres, described the impact of the COVID-19 pandemic as a ‘generational catastrophe’ (United Nations, 2020).

In response to this “forced” transition from classroom teaching to emergency remote teaching, teacher educators at colleges and universities, as well as school teachers, had to adapt quickly (Flores & Gago, 2020). Teachers and student teachers faced challenges such as transitioning their teaching to an emergency remote online or blended format, learning new technology skills, re-planning and implementing an adjusted curriculum, and dealing with their own fears and anxieties (Dube, 2020; Mpofu, 2020; Mukuna & Aloka, 2020). While colleges and universities could arrange for teaching and learning to continue via various online platforms, the same could not be done for student teachers on teaching practice due to school closures, making teaching practice supervision impossible (Moyo, 2020).

The COVID-19 pandemic necessitated a shift from face-to-face to online delivery modes in higher education institutions and schools globally. However, this transition posed challenges for student teachers on teaching practice, which requires classroom observation, field-based coursework, and face-to-face practicum (Yamamura & Tsutsui, 2021). Tekel et al., (2020) found that countries like Canada, Malaysia, and Zimbabwe could not continue with distance education due to infrastructure limitations. Consequently, the requirements to complete teaching practice via distance education were abolished in these regions (Tekel et al., 2020).

In the wake of the COVID-19 pandemic, resilience has become a crucial attribute for student teachers on teaching practice. Resilience is defined as the ability of a dynamic system to adapt successfully to disruptions that threaten its function, viability, or development (Masten, 2014).

Research indicates that teachers exhibiting resilience are more likely to persist in challenging situations, adapt to change more readily, and are less likely to consider leaving the profession (Olsen, 2017). Applying a resilience framework to student teachers on teaching practice could enhance their resilience by building personal resources (e.g., motivation, social and emotional competence), understanding how to mobilize contextual resources (e.g., relationships and support networks), and developing adaptive coping strategies (e.g., problem-solving, time management, maintaining work-life balance) to maximize adaptive, resilient outcomes (e.g., commitment, job satisfaction, wellbeing, engagement) (Mansfield et al., 2016).

Research on teacher resilience has been conducted in the United Kingdom, Ireland, Australia, and Europe, with only a few studies focusing on the African perspective, such as those carried out in South Africa by Ebersohn, (2014) and Mansfield et al., (2016). However, none of these studies have specifically addressed the resilience of student teachers on teaching practice in the COVID-19 era. Student teachers on teaching practice worldwide have reported moderate to high levels of anxiety concerning teaching practice (Kebbi & Al-Hroub, 2018). They are also reported to be prone to stress as they enter a field where professional teachers are highly stressed (Harmsen et al., 2018; Gutierrez et al., 2016). The stress associated with teaching practice has been amplified by the COVID-19 pandemic, underscoring the need to explore student teachers' resilience on teaching practice in the COVID-19 era.

Numerous risk factors could induce stress in student teachers during teaching practice, especially in the COVID-19 era. While the causes of stress in teachers worldwide have been extensively researched, less work has been done on the stressors for student teachers on teaching practice. Alson (2019) identified hazardous working conditions, lack of resources, and excessive monitoring by administrators as stressors for teachers. Dankade, Bello, and Deba (2016) pointed to workload, large class sizes, lack of motivation, and student indiscipline as primary stress causes. Economic-related stress, school policies, and management practices were found to cause moderate to high stress in teachers (Olivier & Betonio, 2015), while Addison and Yankyera (2015) identified work overload and interpersonal relationships as the main stressors for female teachers. Venter (2003) highlighted work demands, pupil misbehavior, and negative feedback as core contributors to teacher stress.

Given their susceptibility to stress, student teachers on teaching practice should be equipped with coping mechanisms that promote resilience (Gutierrez et al., 2016). While many personal and contextual resources important for teacher resilience have been acknowledged, and recommendations have been made at individual, school, and system levels (Day & Gu, 2014; Johnson et al., 2014), fewer studies have identified specific ways teacher education can contribute positively to developing resilience in student teachers on teaching practice (Manfield, Beltman & Price., 2016). This study aims to propose a resilience framework to enhance resilience in student teachers on teaching practice during a pandemic, such as COVID-19. It is crucial to consider the risk factors, protective factors, and individual strengths available to student teachers on teaching practice in Masvingo District to foster adaptive functioning amid COVID-19-induced stressors.

Research exploring student teachers' resilience on teaching practice in the COVID-19 era has been scarce in Zimbabwe. A few studies conducted in Zimbabwe on the causes of stress in student teachers found that stress was a major challenge for pre-service teachers on attachment (Nyabadza and Mutendera, 2014). The most prevalent sources of stress were ineffective mentorship, high college expectations, harassment by lecturers, and inadequate home support. Mapfumo, Chitsiko, and Chireshe (2012) identified difficult learners, low allowances, heavy workload, and a shortage of teaching-learning media as the main stressors for student teachers on teaching practice. Mavundutse (2004) found that Theory of Education examinations, workload, and being non-resident were stress sources among teachers' college students, without specifically referring to teaching practice. None of these studies were conducted in Masvingo District, particularly regarding exploring student teachers' resilience on teaching practice in the COVID-19 era. Given this background, this study seeks to explore student teachers' resilience on teaching practice in the COVID-19 era.

### **1.3 Statement of the problem**

While there is substantial research into stressors of qualified teachers (Mahmoudi, 2016; Addison, 2015), there is little research on exploring student teachers' resilience on teaching practice, especially in Zimbabwe (Mapfumo, Chitsiko & Chireshe, 2012). In December 2019, a new type of virus emerged in Wuhan, China and shortly afterwards it turned into an epidemic that was effective all over the world by January 2020 disrupting the education system (Tekel,

Byir & Dulay, 2022). The challenges faculties of education confronted during the epidemic involved all aspects of teacher training, including the management of teaching practice (North-West University, 2020). Teaching practice stresses have been exacerbated by the outbreak of COVID-19, yet teachers' colleges do not adequately develop resilience in student teachers before they go out on teaching practice. Thus, this study seeks to propose a resilience framework that will be used by lecturers in teachers' colleges to promote resilience in student teachers before they go on teaching practice. This study will add to the body of research because studies on the student teachers' resilience on teaching practice are limited (Manfield, 2016).

The researcher's qualifications in psychology of education, extensive experience as a lecturer, vast experience as Head of Teaching Practice Department, Lecturer-in-Charge of Teaching Practice Department and an External Assessor of Teaching Practice seconded to the Department of Teacher Education, University of Zimbabwe, enabled me to observe how some student teachers are resilient amidst teaching practice stressors while others fail to resist the pressure and fail Teaching Practice or drop out, hence the need for this study to propose a resilience framework that will be used to promote resilience in student teachers on teaching practice especially during a pandemic. The assessment criteria enacted by the Department of Teacher Education, University of Zimbabwe demands that student teachers on teaching practice are supervised or assessed in schools as they practically execute lessons to learners (Chivore, *et al.*, 2015). Due to COVID-19, schools were closed on 24 March 2020 and were scheduled to open on 12 May 2020 for the second term but due to extended lockdown measures the schools remained closed (Chitanana, 2021). WHO noted that in Zimbabwe schools remained closed for five months further exacerbating inequalities and exclusion that have been haunting the education sector for years (WHO, 2020). As a result of the COVID-19 pandemic induced lockdowns, school closures and the subsequent standard protocols for the prevention of the spread of COVID-19 put in place by the government in line with the World Health Organization regulations, face-to-face teaching practice supervision and assessment was abandoned leaving student teachers on teaching practice with a lot of uncertainties and a plethora of challenges. This study seeks to propose a hybrid assessment criterion which combines face-to-face and e-supervision of student teachers on teaching practice.

As the COVID-19 pandemic ravages the world, student teachers on teaching practice are more prone to teaching practice stress than ever before due to fear of contracting the pathogen, lack of knowledge of how to protect themselves, lack of access to personal protective equipment (PPEs) and e-learning platforms, prolonged school closures, prolonged teaching practice period, phased re-opening of schools and cessation of their teaching practice allowances. There is no pre-service teacher resilience subject in the teacher education curriculum in Zimbabwe, hence the need for resilience subject to be a part of the teacher education curriculum (Cefai & Cavioni, 2014) taking cognoscente of a multitude of challenges outlined above. It is anticipated that if student teachers have an awareness of protective mechanisms of resilience promotion, it may lead to stress reduction, psychological well-being and improved efficiency and competence in teaching practice. This study, therefore, seeks to explore the student teachers' resilience on teaching practice in the COVID-19 era and inform teacher education programs of the most effective ways of promoting resilience in the face of adversity, in student teachers on teaching practice.

#### **1.4 The main research question**

The study sought to provide answers to the following main research question:

What is the student teachers' resilience on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe?

In an attempt to answer the main research question, the study was directed by the following subsidiary questions:

1.4.1 What are the major COVID-19 induced teaching practice stressors in Masvingo District, Zimbabwe?

1.4.2. What are the factors that hinder the resilience of student teachers on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe?

1.4.3. What personal and contextual resources contribute to resilience outcomes in student teachers on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe?

1.4.4. What kind of support do student teachers on teaching practice receive in the COVID-19 era in Masvingo District, Zimbabwe

## **1.5 Aim and objectives of the study**

### **1.5.1 Aim of the study**

In alignment with the research questions, the aim of this study was:

To explore the student teachers' resilience on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe.

### **1.5.2 Research objectives**

To achieve the aforementioned aim, the following research objectives were targeted:

1.5.2.1 To identify the major COVID-19 teaching practice induced stressors.

1.5.2.2 To explain factors that hinder the student teachers' resilience on teaching practice in the COVID-19 era.

1.5.2.3 To describe personal and contextual resources that contribute to resilient outcomes in student teachers on teaching practice in the COVID-19 era.

1.5.2.4 To establish the kind of support that student teachers receive on teaching practice in the COVID-19 era.

## **1.6 Theoretical Framework**

The theoretical framework of this study is guided by resilience theory, which originated from the exploration of adversity and its harmful impacts on individuals (Van Breda, 2018). Early contributors to resilience research, including Norman Garmezy, Lois Murphy, Michael Rutter, and Emmy Werner, aimed to enhance practice by understanding the mechanisms that allowed some individuals to manage adversity effectively, while others struggled (Masten, 2013). Their insights and research advanced the field of resilience science by moving away from deficit-focused models towards those emphasizing positive aims, promotive factors, and adaptive capacities (Masten, 2014). The primary objective of resilience-informed practice is to encourage positive adaptation and development in high-risk or adverse situations (Yates, Tyrell & Masten, 2014). Consequently, resilience theory offers a framework for this study to investigate the resilience of student teachers on teaching practice during the COVID-19 era, with a focus on the positive rather than the maladaptive (Rutter, 2012).

Resilience, defined as the capacity to recover from adversity, is a complex dynamic process that varies across spatial, cultural, and temporal contexts (Theron, 2013). Ungar (2012) argues that resilience is deeply intertwined with cultural interpretations. Easterbrooks et al. (2013:100) describe resilience as neither a personal attribute nor an environmental factor, but as a product of interactions between individuals and their environment within a dynamic system. Resilience research encompasses three related components: adversity, outcomes, and mediating factors (Van Breda, 2018). Therefore, resilience is conceptually a process leading to an outcome, with the central focus of resilience research being the mediating processes. This perspective enables the study to explore the mediating factors that foster positive outcomes in student teachers on teaching practice during the COVID-19 era.

In a world fraught with daily challenges and unexpected trials, individuals often face a myriad of stressful situations (Pauley, McKim & Hodbod, 2019). Every teacher education course incorporates periods of hands-on experience in schools, which can be particularly stressful as student teachers grapple with the realities of teaching (Mansfield et al., 2016). The sources of stress and anxiety for student teachers on teaching practice stem from areas such as subject content knowledge, instructional strategies, workload, classroom discipline, and relationships with learners, cooperating teachers, and parents (Gutierrez et al., 2016). Stress, a universal contributor to health issues, permeates various environments, including homes, workplaces, industries, and academic settings (Ekpenyong, et al., 2013). Thieman, Max, and Kitchel (2014) delineated two theoretical approaches to teacher resilience: the multidimensional approach, where personal and environmental factors converge to form teacher resilience, and the strategic approach, where teacher resilience is viewed as an adaptive process involving various strategies. Coping mechanisms, which are processes employed to manage the demands of stressful events (Bland, et al., 2012), include cognitive, behavioral, and social coping strategies used by student teachers amidst stressors (Gutierrez, et al., 2016).

Resilience theory underscores the importance of protective mechanisms and coping skills, which are integral components of resilience. Protective mechanisms are factors associated with adaptive functioning in adverse situations (Graber, Pichon & Carabine, 2015). These mechanisms, such as parental support, secure attachment, mentoring relationships, supportive friends, academic resilience, and socio-economic status, foster resilience in the face of adversity (Graber, Pichon &

Carabine, 2015). Therefore, this study, drawing its motivation from resilience theory, aims to investigate the resilience of student teachers on teaching practice during the COVID-19 era.

## **1.7 Summary of the research methodology**

### **1.7.1 Research approach**

This study employs a qualitative approach. As Leavy (2017) suggests, qualitative research is grounded in a naturalistic phenomenological philosophy that perceives reality as multi-layered, interactive, and a shared experience. It is a form of interpretative inquiry where researchers interpret what they observe, hear, and comprehend (Creswell, 2014). This implies that qualitative research methodology allows the researcher to collect data in the field where participants encounter the issue being studied.

Schumacher and McMillan (2014) also affirm that qualitative research is rooted in a naturalistic phenomenological philosophy that views reality as multi-layered, interactive, and a shared experience. Furthermore, qualitative researchers aim to understand lived experiences in real situations, considering the physical, intellectual, and emotional environment (Chisaka et al., 2013:10). This shows that by understanding the participants' perspectives, qualitative research sheds light on the inner dynamics of situations, dynamics that are often hidden to outsiders (Sefotho, 2015). Creswell (2014) argues that a distinguishing feature of high-quality qualitative research is the presentation of multiple perspectives spanning the entire spectrum of viewpoints.

### **1.7.2 Research Paradigm**

Researchers embark on their studies with a specific paradigm or worldview, which is a fundamental set of beliefs, assumptions, concepts, values, and practices that guide their investigations (Johnson & Christensen, 2014). This study utilizes social constructivism as its research paradigm. According to Creswell (2014), social constructivism is a method employed in qualitative research. The primary objective of researchers adopting a social constructivist approach is to rely heavily on the participants' viewpoints of the situation being studied. This paradigm is particularly suitable for this study, which explores the resilience of student teachers on teaching practice during the COVID-19 era, due to its focus on individual participants, their experiences, and the meanings they assign to these experiences (Pretorius 2013). Social

constructivists posit that individuals create subjective interpretations of their experiences, which are diverse and multifaceted. Therefore, the researcher seeks to uncover the complexity of views rather than condensing meanings into a few categories or ideas (Creswell, 2014). The subjective interpretation of reality inherent in social constructivism makes it an appropriate choice for this study (Magwa, S. & Magwa, W., 2015).

### **1.7.3 Research design**

Research designs serve as blueprints for research, encompassing decisions from broad assumptions to detailed methods of data collection and analysis (Shannon-Baker, 2016). This study utilizes a phenomenological research strategy of inquiry. Within the realm of qualitative research, phenomenological studies place a strong emphasis on interpretative analyses and are primarily focused on capturing the uniqueness of events (Yin, 2012). Phenomenological research, rooted in philosophy and psychology, involves the researcher describing the lived experiences of individuals regarding a phenomenon as articulated by the participants themselves (Leavy, 2017). A key strength of a phenomenological research study is its ability to observe effects in real-world settings, acknowledging that context significantly influences both causes and effects (Sefotho, 2015). The objective of a phenomenological researcher is to gain insight into the participants' life-worlds and to comprehend their lived experiences (Johnson & Christensen, 2014). This study aims to understand the individual experiences, the context of these experiences, and the resilient responses they employed in the face of stressors induced by the COVID-19 pandemic during teaching practice.

### **1.7.4 Data collection tools**

#### **1.7.4.1 Semi-structured Interviews**

Multiple sources of data such as semi-structured interviews and focus group discussions were used rather than relying on a single data source (Creswell, 2014). This research study employed semi-structured interviews as an appropriate tool for data collection. The advantage of semi-structured interviews is that they provide an opportunity for follow-up questions and further probing (Cohen, Manion & Morrison, 2014; Pandey & Pandey, 2015). Semi-structured interviews are considered appropriate for this study as they accorded the researcher the opportunity to understand the world from the standpoint of the participants (Barbour, 2013). Furthermore, semi-structured interviews enabled the researcher to collect data that could not be

easily accessed using other methods, for example, data from gestures and facial expressions exhibited when participants expressed their feelings on COVID-19 induced teaching practice stressors.

The researcher conducted face-to-face interviews using an interview protocol with ten (10) student teachers on teaching practice and six (6) students' mentors at their practicing schools which are their natural settings.

During the interviews the researcher ensured that all the interviewees adhered to the World Health Organization standard recommendations to prevent the spread of COVID-19 which include frequent cleaning of hands using alcohol-based hand rub or soap and water; covering the nose and mouth with a mask and maintaining physical social distancing (World Health Organization, 2020).

#### **1.7.4.2 Focus Group Discussions**

This study employed focus group discussions as a technique for data collection. The researcher regards the use of focus group discussions as an innovative way of exploring the topic through conducting in-depth interviews with several people at the same time (Mertens, 2015). Focus group discussions are extremely informative because participants feed off others' comments (Mertler, 2014). The focus group discussions allowed participants to interrogate and verify their opinions and those of other participants. Focus group discussions allow participants to listen and reflect on what others say and further consider their standpoints (Mertens, 2015).

Three (3) focus group discussions with seven (7) student teachers each were conducted with student teachers on teaching practice in their practicing schools. During the focus group discussions, the researcher ensured that all the participants adhered to the World Health Organization standard recommendations to prevent the spread of COVID-19; these included frequent cleaning of hands using alcohol-based hand rub or soap and water; covering the nose and mouth with a mask and maintaining physical social distancing (World Health Organization, 2020).

All the interviews and focus group discussions were tape-recorded so as to capture all the details. Audio tapes will be re-played so as to familiarise with the data.

The use of multiple data sources boosted the credibility and trustworthiness of the research findings (Cohen, Manion & Morrison, 2018).

### **1.7.5 Mechanisms for selection of participants**

#### **1.7.5.1 Population and sampling methods**

A population is a set of all elements, a large group to which a researcher wants to generalize the sample results (Johnson and Christensen, 2014). Neuman (2013) defines a population as the collectivity of study units which the researcher plans to study and make claims about. For this research, the population comprised all the student teachers from Morgenster Teachers' College who were on teaching practice and their mentors.

This study employed non-probability sampling methods such as convenience sampling and purposive sampling. Convenience sampling was used to sample one teachers' college because of its typicality and accessibility. Researchers basically choose the sample from those to whom they have easy access (Cohen, Manion and Morrison, 2018).

According to Yin (2012), the goal of purposive sampling is to sample those participants that will yield the most pertinent and abundant data. This means that individuals and a site for study are selected because they can purposefully enlighten an understanding of the research problem and central phenomenon in the study (Datts, 2016) in this case exploration of student teachers' resilience on teaching practice in the COVID-19 era.

Purposive sampling was used to sample three (3) primary schools located in Masvingo District, which are near Morgenster Teachers' College and have student teachers on teaching practice from Morgenster Teachers' College. Furthermore, purposive sampling was used to sample student teachers on teaching practice and students' mentors from the selected three primary schools. Thus, purposive sampling was used to hand-pick information-rich participants as well as access well-informed persons on the phenomenon under study (Pandey & Pandey, 2015).

### **1.7.5.2 Sample size**

The sample size used consisted of twenty-one (21) student teachers from Morgenster Teachers' College who were on teaching practice and six (6) students' mentors to give a total of twenty-seven (27) participants. In qualitative research, it is more probable that the sample size will be small (Cohen, Manion & Morrison, 2018). The size of the sample may seem small but Ritchie *et al* (2014) posit that samples in qualitative research are usually small because of the homogeneous nature of the sample.

### **1.8 Data analysis, interpretation, reporting and quality assurance**

Research data were analyzed using interpretive phenomenological analysis (IPA) which aligns well with the phenomenological research design (Smith & Nizza, 2021). Qualitative data were collected through semi-structured interviews and focus group discussions. Data analysis involved compiling, disassembling, reassembling, interpreting and concluding (Yin, 2016). As a first step in data analysis, audiotape-recorded interviews and focus group discussions were transcribed verbatim. Transcription is the process of transforming qualitative research data, such as recordings of focus group discussions into typed texts (Smith & Nizza, 2021). Secondly, the researcher read through transcripts several times so as to familiarize with the data. After familiarizing with the data, the researcher re-played the audio tapes typing what was said into a word processing file.

In the third step, raw data were coded by the researcher using unique identification category names after the process of segmenting the raw data. The most crucial activity in analyzing research data is that of coding or organizing related segments of data into thematic categories (Smith & Nizza, 2021). The coding process enabled the researcher to quickly retrieve and collect together all the data associated with the same thematic idea so that the sorted bits and pieces could be examined together and different cases compared easily (Maree, 2015). Re-assembling the codes enabled the researcher to identify robust categories which represented patterns that helped in developing thematic statements.

The fourth step involved the examination of coded and collated data extracts to identify themes of broader significance (Johnson & Christensen, 2014). At this stage, the researcher reviewed the

coded data to identify areas of similarity and overlap between codes. Codes which seemed to share the same unifying features were clustered together by the researcher in order to generate themes and sub-themes (Lochmiller, 2021).

In the fifth step, themes are reviewed to ensure that the thematic map accurately and adequately represents the entire body of data (Dube, 2015). Reviewing the potential themes was done by the researcher for quality checking by checking themes against the collated extracts of data and to find out whether the theme works in relation to the collected data (Lochmiller, 2021). During the reviewing process, many themes and sub-themes were either merged with other main themes or discarded while others were renamed by the researcher.

In step six, the themes are refined and named to ensure that they are brief and adequately descriptive. The researcher further refined the themes by carefully reading through all the main themes and sub-themes, codes and extracts then the theme and sub-theme names were finalized to tell a story about the collected data (Dawadi, 2020).

In the seventh, the researcher looked for superordinate themes by comparing and contrasting themes that are found across cases, and created superordinate themes (Smith & Nizza, 2021).

The eighth step, is the final step which involved writing up the final analysis and description of the findings. Tables and verbatim statements said by the participants were used as adjuncts to the discussions. Low inference descriptors promoted trustworthiness of this study (Creswell, 2014). The researcher made a great effort to provide a concise, coherent and logical account of the story that the data represented within and across themes by providing sufficient evidence or extracts which could capture the essence of the point the researcher was demonstrating (Dawadi, 2020). Contributions from various scholars were correctly credited to avoid plagiarism (Johnson & Christensen, 2014).

## **1.9 Trustworthiness**

Trustworthiness is about making sure that the research findings are precise and exhaustive as seen from the perspective of the researcher, the participants and the readers (Patton, 2015). When qualitative researchers speak of research validity, they are usually referring to qualitative research that is plausible, credible, trustworthy and therefore defensible (Johnson & Christensen, 2014). In this qualitative study, the researcher used Lincoln and Guba's (1985) model to reduce

any bias that might surface in the results so as to boost trustworthiness (De Vos, *et al.*, 2011). Therefore, in the process of ensuring trustworthiness in this study, the researcher employed the principles of dependability, credibility, transferability and conformability (Dube, 2015).

### **1.10 Significance of the study**

Research studies on the resilience of teachers have been done in various countries, however, research on the resilience of student teachers on teaching practice in the COVID-19 era is very rare. The study is significant in that it adds to the limited literature in Zimbabwe on student teachers' resilience on teaching practice in the COVID-19 era. Furthermore, this study is also significant in providing clarity on the construct of the resilience of student teachers on teaching practice in the COVID-19 era. The research study may contribute relevant literature thereby increasing the knowledge base to be used by future researchers on the resilience of student teachers on teaching practice.

Student teachers on Teaching Practice would benefit from the development of coping skills that develop resilience amidst COVID-19 generated teaching practice stressors. This study is significant in that it may expand the knowledge base of student teachers and generates new ideas that could cultivate resilience in student teachers on teaching practice facing adversity and ultimately improve their psychological wellbeing, motivation, commitment, teaching competences, academic achievement and job satisfaction.

The research findings may enable the researcher to propose a resilience framework that will be used to promote resilient strategies that foster adaptive functioning in student teachers on teaching practice. Knowledge of how student teachers on teaching practice develop resilience will inform teacher education programs, school heads and mentors of the most effective ways of providing support (Gutierrez *et al.*, 2016). This study, therefore could uniquely inform education policy makers, the Ministry of Higher and Tertiary Education Innovation Science and Technology Development, the University of Zimbabwe and Teachers' Colleges on the feasibility of introducing a resilience module in the teacher education curriculum.

The research findings may act as a spring board for future research studies on the promotion of resilience in student teachers on teaching practice in the COVID-19 era and or any other pandemics or adversities.

### **1.11 Limitations of the study**

The research study like all other research was vulnerable to some restrictive conditions. The researcher was wary about the transferability of findings and the COVID-19 pandemic.

Since this study is a qualitative phenomenological study the sample size seems small so the results may not be transferred to all student teachers on teaching practice in Zimbabwe in the COVID-19 era. The size of the sample may appear small but Ritchie, *et al.*, (2014) posit that samples in qualitative research are usually small because of the homogeneous nature of the sample. To ensure transferability the researcher used thick descriptions of participants, data collection methods and research findings. The thick descriptions ensured that the ultimate research methods and results could be applied to other similar settings and circumstances in Zimbabwe and elsewhere (Dube, 2015).

Since May 2020, the COVID-19 pandemic has significantly intensified, with a number of confirmed cases and deaths increasing nearly on a daily basis (WHO, 2020). This research study was carried out at a time when the COVID-19 pandemic continued to rage around the world, Zimbabwe included, so the participants were scary of exposure to the virus through the interviews and focus group discussions. To ward off the participants' fears the researcher provided masks, sanitizers and gloves to each participant, the venues and furniture we used were fumigated prior to the interviews and focus group discussions. During the interviews and focus group discussions the researcher ensured that all the participants adhered to the rules and regulations for the prevention of the spread of COVID-19 proclaimed by the government of Zimbabwe in line with the World Health Organization standard recommendations. These included proper masking up, maintaining physical social distance and washing hands using alcohol-based sanitizers. As a result, each participant participated freely without any fears so adequate, relevant and credible data were gathered without any hindrances.

## **1.12 Demarcation of the study**

### **1.12.1 Conceptual demarcation**

The primary focus of this study was on exploring student teachers' resilience on teaching practice in the COVID-19 era. The resilience theory informs the theoretical framework of this research study. Whilst there are various forms of resilience, for example, structural resilience, and teacher resilience, this study is demarcated to resilience of student teachers on teaching practice. The study focuses on teaching practice stressors, factors that hinder the resilience of student teachers on teaching practice, personal and contextual resources that promote the resilience of student teachers on teaching practice and the support that student teachers on teaching practice receive from various stakeholders in the COVID-19 era.

All the sixteen (16) primary school teachers' colleges operate under the University of Zimbabwe scheme of association, as a result, they follow a generic curriculum. The curriculum comprises four (4) major areas, these are, Professional Studies, Educational Foundations, Main Study and Teaching Practice. This study is demarcated to Teaching practice. Teaching Practice is done in three terms in the second phase of the teacher education programme. To complete teaching practice student teachers are supposed to be supervised by college lecturers and to be externally examined by external assessors from the University of Zimbabwe doing practical activities in the classroom with the learners. With the outbreak of COVID-19 student teachers on teaching practice are exposed to a number of challenges among them, contracting the COVID-19 virus, sickness, death, school closures, prolonged teaching practice period, the need to enforce COVID-19 regulations in the classroom and the transference of face-to-face teaching to online teaching.

### **1.12.2 Geographical demarcation**

This study was geographically demarcated in Zimbabwe, a country located in the Southern African Development Community (SADC) region. Zimbabwe has ten (10) provinces of which the study was undertaken in Masvingo Province, specifically Masvingo District. To be precise, the study was carried out with student teachers on teaching practice from Morgenster Teachers' College deployed in primary schools in Masvingo District. Morgenster Teachers' college is located thirty-five (35) kilometres from the city of Masvingo. The college is situated in Morgenster Mission which was established by the Dutch Missionaries from Holland in 1902.

The mission station is five (5) kilometres south-west of Great Zimbabwe Monuments and is also under the jurisdiction of Chief Mugabe.

The study was demarcated to three (3) primary schools in Masvingo district which were Morgenster Central Primary School, Nemanwa Primary School and Nemazuwa Primary School. Morgenster Central Primary School is located in Morgenster Mission, while Nemanwa Primary School is fifteen (15) kilometres north-east of Morgenster Teachers' College. Nemazuwa Primary School is twenty-seven (27) kilometres north-west of Morgenster Teachers' College. Six experienced student teachers' mentors from the three sampled primary schools who were actively involved in mentoring in the COVID-19 era were purposively sampled to participate in the study. Twenty-one (21) student teachers from Morgenster Teachers' College deployed for teaching practice in the three (3) sampled primary schools were purposively sampled to take part in this study due to their experience of being on teaching practice in the COVID-19 era. The student teachers' mentors and the student teachers on teaching practice were sampled because they were information-rich (2015; Creswell, 2014).

### **1.13 Ethical considerations**

Research ethics were considered prior to conducting the research because doing research with participants demands a clear set of ethical behaviors (Ethical Clearance, UFS-HSD2022/0020/22). There is a need to adhere to the American Educational Research Association (AERA) set standards designed specifically to guide the work of educational researchers (Cohen, Manion & Morrison, 2018; Johnson and Christensen, 2014). The five broad goals of AERA are; professional competence, integrity, scholarly responsibility, respect for people's rights, and social responsibility. In order to ensure researcher competence and integrity, utmost scholarship is considered to avoid any form of deception and to protect the privacy of the participants. Accordingly, informed consent, privacy, anonymity, confidentiality, debriefing, non-maleficence and beneficence were maintained throughout the study (McMillan & Schumacher, 2014). Participants signed consent forms consenting to their participation in the study and recording of audios during the interviews.

Prior to conducting the research, the researcher applied for ethical clearance from the University of the Free State's Faculty of Education Ethics Board. Adherence to the code of ethical guidelines of the Faculty of Education was upheld. Furthermore, permission to carry out the

study was sought from the Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development and the Ministry of Primary and Secondary Education in Zimbabwe before carrying out the research.

## **1.14 Definition of key terms**

### **1.14.1 Adversity**

Luthar (2015) defines adversity as a high-risk condition which carries high odds for measured maladjustment in critical domains, such as, political violence, displacement, national disasters or extreme poverty which negatively influence the conditions in which the population lives, work or learn. In the same vein, Rochford & Sheehan (2016) define adversity as a lack of positive circumstances which may be brought by physical, mental or special losses, or by experiencing distress. Adversity is a state of hardship, difficulty or misfortune that one deals with in life (Luthar & Small, 2015). Within the context of this study, adversity mean a high-risk condition in which the student teachers were student teachers on teaching practice were exposed to the Covid-19 virus. Risk of exposure to the Covid-19 virus impacted negatively on the social, physical, health and psychological well-being of the student teachers which hindered their resilience during teaching practice.

### **1.14.2 COVID-19**

COVID-19, caused by the SARS-CoV-2 virus is a highly contagious respiratory disease spread through droplets from infected persons who may be symptomatic or asymptomatic (WHO, 2020). SARS-CoV-2 (severe acute respiratory syndrome) leads to sever and potentially fatal respiratory tract infections (Cirrincione, *et al.*, 2020) SARS-CoV-2 causes fever, chills and body aches and often progresses to pneumonia, a sever condition in which the lungs become inflamed and fill with pus. There are important differences between previous disease outbreaks and the COVID-19situation, for instance unlike Ebola, transmission of COVID-19 is asymptomatic and the outbreak is global (Hallgarten, 2020). In severe cases, COVID-19 can manifest itself as pneumonia and patients can develop acute respiratory distress in a short period of time and die due to multiple organ failure (Guo, *et al.*, 2020). In the present study, COVID-19 means a highly contagious respiratory disease which causes sickness, death, confinement of people, the closure of schools and the transfer of face-to-face teaching to online teaching.

### **1.14.3 e-learning**

Tamm (2023) define e-learning as the acquisition of knowledge that takes place through electronic technologies and media such as computers and smart phones through the internet. Arkorfu & Abaidoo (2017) describe e-learning as using information and communication technologies to enable access to online teaching and learning. Clark & Mayer (2021) define e-learning as a type of online education and knowledge sharing that is carried out through the internet. Within the context of this study, e-learning is teaching and learning through by utilizing electronic technologies and media such as laptops, smart phones, tablets and computers through online platforms such as Google class, Microsoft Teams, zoom and WhatsApp. The use of e-learning to access educational curricular outside of the traditional face-to-face teaching was necessitated by the need to curb the spread of COVID-19 pandemic.

### **1.14.4 Resilience**

The term resilience derives from the Latin verb *resilire* which means to rebound or ‘leap back’ (Fletcher & Sarkar, 2013). The American Psychological Association (2014) defines resilience as ‘the process of adapting well in the face of adversity, trauma, calamity, threats or even substantial sources of stress, for example, family and relationship problems, serious health problems or workplace and financial stressors. It means ‘bouncing’ back from difficult experiences. Resilience refers to the capacity of a dynamic system to acclimatize successfully to disturbances that threaten the viability, function, or development of that system (Masten, 2014). According to Ungar (2013) ‘In the context of exposure to significant adversity, whether psychological, environmental or both, resilience is both the capacity of individuals to navigate their way to health-sustaining resources, including opportunities to experience feelings of wellbeing, and a condition of the individuals’ family, community and culture to provide these health resources and experiences in culturally meaningful ways’. In the context of this study, resilience entails adversity or risk and the capacity to bounce back resulting in a positive outcome experienced by the person previously exposed to adversity.

### **1.14.5 Student teacher**

A student teacher is a beginner who receives guidance and support from a more knowledgeable or more experienced individual in the same field (Hudson & Hudson, 2016). Ngara and Ngwarai (2012) define a student teacher as any student who is enrolled in an institution of higher learning for teacher training and who is deployed in practicing schools by such institution to do teaching practice under the direction of a regularly employed and certified teacher. In this study the term student teacher describes a novice who is studying to be a teacher, who receive support and guidance from a qualified teacher. The student teacher observes classroom instruction and is guided by the more experienced teacher on record keeping, class and classroom management. In the context of this study, a student teacher is any student enrolled at a primary school teachers' college for the purpose of primary school teacher training in order to obtain a Diploma in Education certificate.

#### **1.14.6 Student's mentor**

A student's mentor is a person who can support, advise and guide a student teacher (Cronin, 2022). Businessnewsdaily (2023) define a student's mentor as a qualified individual who imparts knowledge, expertise and wisdom to a less experienced person. A student's mentor is an expert teacher designated to assist, guide and support a student teacher (Wetzel, Hoffman & Malock, 2017). In the same vein, Ryan (2023) defines a student's mentor as an expert teacher who provides guidance, support and instruction to a student teacher. Within the context of this study, a student's mentor is a more knowledgeable and experienced teacher who scaffolds a less experienced student teacher to develop into a successful professional teacher.

#### **1.14.7 Teacher Resilience**

Resilience as 'a capacity to bounce back' is incomplete and inadequate in a teaching context (Gu and Day, 2013). Teacher resilience is better defined as 'capacity to manage the unavoidable uncertainties inherent in the realities of teaching (Gu & Day, 2013:29) and to 'maintain balance and a sense of commitment and agency' (Gu & Day, 2013:16). Hiver (2018) defines teacher resilience as using all the resources available to maintain personal wellbeing alongside professional productivity in the face of adversity and detrimental conditions, what Gu & Day, (2013) have termed 'the capacity to maintain equilibrium and a sense of commitment, agency and moral purpose in the everyday worlds in which teachers teach.

Within the context of this study, resilience involves the capacity of an individual teacher to harness personal and contextual resources to navigate through challenges, the dynamic process whereby characteristics of individual teachers and of their personal and professional context interact over time as teachers use particular strategies to enable the outcome of a teacher who experiences professional engagement, enthusiasm, satisfaction, and wellbeing (Beltman, 2015).

#### **1.14.8 Teaching Practice**

Teaching practice is a form of ‘work-integrated learning’ that is described as a period of time student teachers are working in schools to receive specific on-the-job training in order to apply theory into practice (Mavundutse, *et al.*, 2014). Teaching practice is a platform where student teachers gain first-hand experience in teaching about which theoretical information is provided by the college during the first academic residential phase (Kosar, 2021). Teaching practice can be considered as a pre-service training opportunity aiming to improve the professional competencies of student teachers who will take part in the education system in future (Eti & Karaduman, 2020). Teaching practice focuses on classroom activities and student teachers apply their theoretical knowledge which allows them to recognize their strengths and weaknesses and have a different experience in the process of being a teacher (Tekel, Bayir & Dulay, 2022). In the present study, therefore, teaching practice is a form of work-integrated learning based on the partnership between the practicing school, the students’ mentors, college supervisors and the student teacher which is based on the principle of learning by doing-experience through the activities in the classroom (Tekel, Bayir & Dulay, 2022).

#### **1.15 Thesis outline**

##### **Chapter 1: The problem and its setting**

Chapter 1 provides an overview of the study. It focuses on the introduction, background of the study, problem statement, significance of the study, research questions, and the aims and objectives of the study. The chapter outlines the theoretical framework that underpinned the study, the research methodology, limitations of the study, delimitations of the study, ethical considerations, definition of key concepts, layout of the study and chapter summary.

## **Chapter 2: Review of related literature**

Chapter 2 outlines the literature review in line with the research questions presented in Chapter 1. Firstly, the chapter presents the conceptual framework which provides an explanation of concepts such as resilience, teacher resilience and the teacher resilience process. The literature is reviewed under the following sub-headings: teaching practice generated stressors in the COVID-19 era, factors that hinder the resilience of student teachers on teaching practice in the COVID-19 era, personal and contextual resources that promote resilience, support that student teachers receive on teaching practice in the COVID-19 era and the theoretical framework underpinning the study.

## **Chapter 3: Research Methodology**

Chapter 3 discusses the research methodology, which includes, the research approach adopted, the paradigm, and the design employed to explore the research questions. This chapter describes the procedures and mechanisms of data collection such as the population, sampling and sample size and also discusses the data collection tools, which are, semi-structured interviews and focus group discussions. The chapter presents the techniques of data analysis, presentation, interpretation, and reporting used in qualitative research design and also expounds on the ethical considerations pertinent to this study.

## **Chapter 4: Data presentation, analysis and discussion**

This chapter presents and interprets qualitative data that was generated from twenty-one (21) student teachers on teaching practice and six (6) students' mentors from face-to-face semi-structured interviews and focus group discussions using interpretive phenomenological analysis (IPA). The discussion of themes and sub-themes is enhanced and enriched by direct quotations from the semi-structured interviews and focus group discussions while situating them in terms of the literature reviewed and theoretical framework outlined in Chapter 2.

## **Chapter 5: Conclusions and recommendations**

Chapter 5 summarises the results of the study, and outlines conclusions and recommendations of the study. The chapter recommends strategies for the enhancement of the development of resilience of student teachers on teaching practice that they will use as an asset against teaching practice stressors induced by any adversity for example, the COVID-19 pandemic.

## **1.16 Summary**

The foregoing chapter presented the background to the study, statement of the problem, research questions, aims and objectives of the study, significance of the study, theoretical framework and overview of the research methodology. Furthermore, data analysis and interpretation techniques have been described as well. In addition, the chapter also highlighted the delimitations of the study, limitations of the study, definition of key terms, ethical considerations and organization of the thesis. Finally, key terms were defined. The subsequent chapter reviews literature related to the study.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter presents literature relevant to the present study that creates a foundation for the study on exploring student teachers' resilience on teaching practice in COVID-19 era. The literature review helped to situate the study into the global and local contexts in the COVID-19 era. The review starts by focusing on the conceptual framework of the study covering the general concept of resilience and the concept of teacher resilience as well as the concept of teaching practice in Zimbabwe. The organization of the literature review corresponds with the research questions of this study as outlined in Chapter 1.

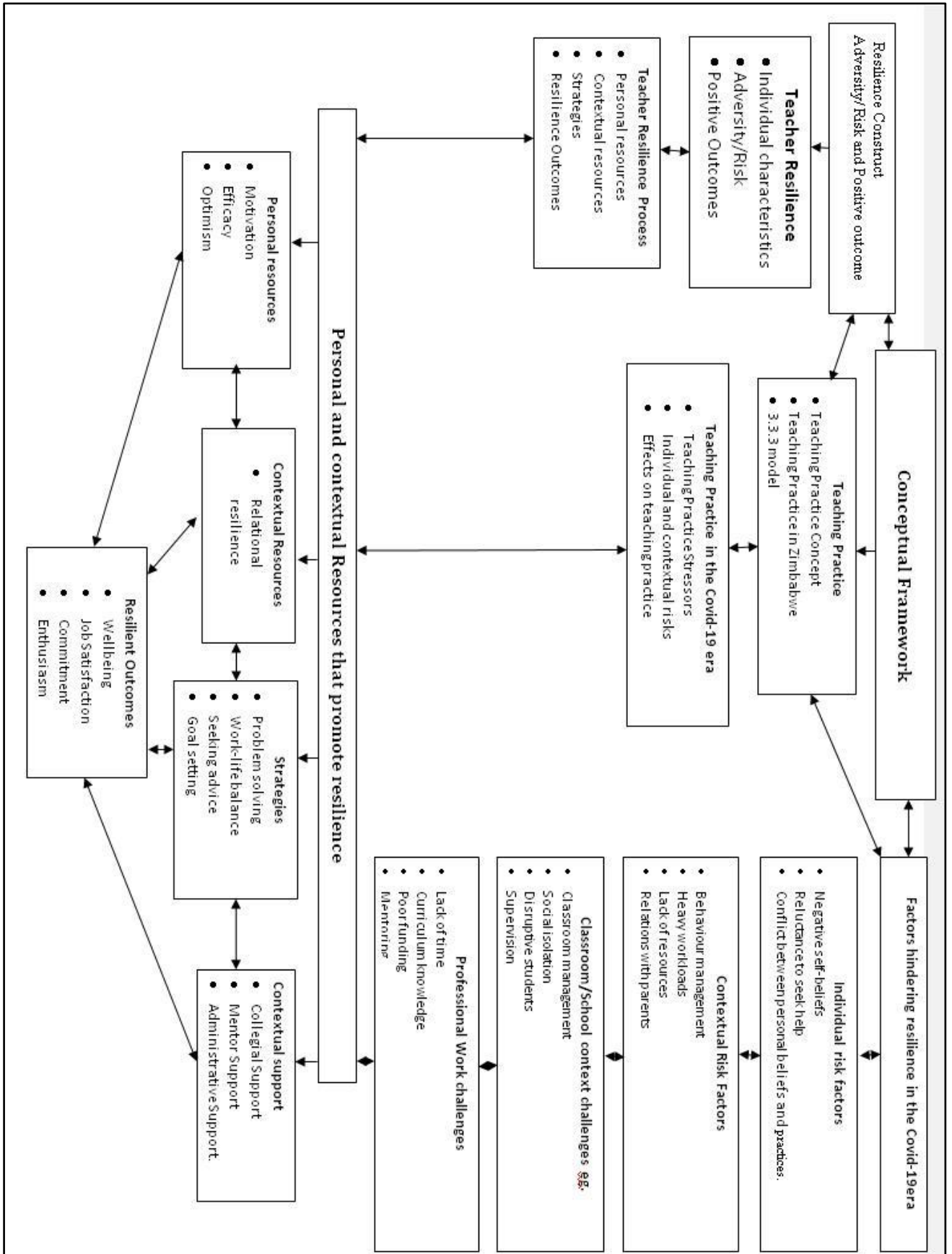
In this chapter the researcher delves into the teaching practice-generated stressors in the COVID-19 era. Individual risk factors, contextual risk factors, work challenges and classroom/school context challenges were reviewed highlighting how they hinder the resilience of student teachers on teaching practice in the COVID-19 era. The review also offered an in-depth discussion on personal and contextual resources which promote the resilience of student teachers on teaching practice in the COVID-19 era. The socio-ecological theory (Bronfenbrenner, 2005) and the relational cultural theory (Jordan, 2006) were discussed highlighting how different systems and relationships influence resilience of student teachers on teaching practice during COVID-19. The chapter reviewed the different types of support student teachers receive on teaching practice in COVID-19 era. Finally, the chapter presents the resilience theory which informs this study. The resilience theory describes how risks/adversities and positive adaptation are crucial for the exploration of resilience of student teachers on teaching practice in COVID-19 era.

#### 2.2 Conceptual framework

Adom, *et al.*, (2018) view a conceptual framework as a product of the researcher's resourcefulness that incorporates pieces borrowed from other theories or ideas. The conceptual framework in this study presents four central concepts, these are, the resilience construct, teaching practice, factors hindering resilience, as well as personal and contextual resources that

promote resilience in student teachers on teaching practice during COVID-19. The conceptual framework for this research study enabled the researcher to identify, analyse and explain the view point within the problem of the study. Additionally, the conceptual framework assisted the researcher in identifying and constructing a worldview on the resilience of student teachers on teaching practice in the COVID-19 era (Ravitch & Riggan, 2017). The elements are described as separate components, but in reality, they are integrated to work as a single unit, each element informing and being informed by the other.

Figure 2.2 Conceptual Framework



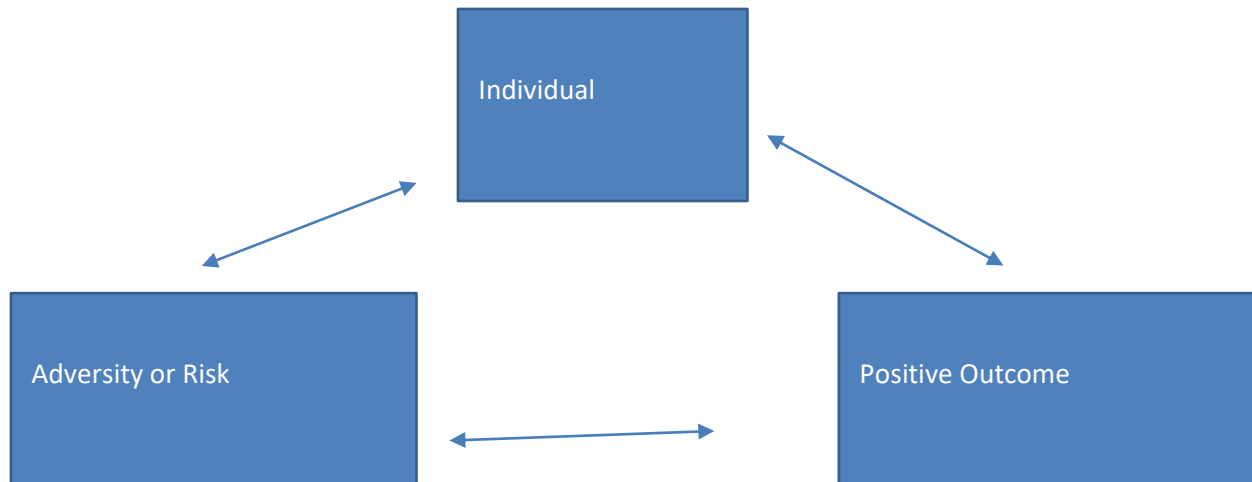
### 2.2.1 Resilience Defined

The term resilience originates from the Latin verb *resilire*, which means to rebound (Fletcher and Sarkar, 2013). Resilience is an interactive concept that is concerned with the combination of serious risk experiences and a relatively positive psychological outcome despite those experiences, however, some individuals have a moderately good outcome despite having experienced serious stress or adversities (Rutter, 2013). Whether psychological, environmental, or both, resilience is both the capacity of individuals to circumnavigate their way to health-sustaining resources, including opportunities to experience feelings of wellbeing, and a condition of the individual's family, community and culture to provide these health resources and experience in culturally meaningful ways. In addition to focusing on the resilience capacities and processes for individuals, definitions of resilience have widened to systemic ones (Hascher *et al.*, 2021). For example, Masten (2014:10) defined resilience as “the capacity of a dynamic system to adapt successfully to disturbances that threaten system function, viability, or development”. A system may refer to an individual, but might be a family, a school, a community, an organization, an economy or an ecosystem Masten (2014) within such a system, resilience is the process of harnessing resources to adapt successfully (Ungar, 2012). Ungar emphasizes that the features of both individuals and the environment led to resilience (Ungar, 2013).

Although there is no agreed definition and conceptualizations of resilience, the majority of definitions of resilience are incorporated of adversity or risk paired with positive outcomes (Vella & Pai, 2019). Thus, for an individual to be said to be resilient they have to be resilient against some form of adversity or risk (VicHealth, 2015). The notion of risk and positive adaptation are crucial to both personal and characteristic, and process-based definitions of resilience hold positive adaptation post adversity as central (Vella & Pai, 2019). The American Psychological Association (2014) defines resilience as “the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress e.g., family and relationship problems, serious health problems or workplace and financial stressors. It means “bouncing back” from difficulty experience

Diagram showing the three elements involved in resilience, which are; the individual who experiences risk or adversity who bounces back to experience positive outcomes.

**Figure 2.2.1 Elements involved in resilience**



*Adapted from Vella & Pai (2019).*

Figure 2.2.1 above shows elements involved in resilience. In this study the notion of risk and positive adaptation are crucial for the exploration of resilience of student teachers on teaching practice in COVID-19 era. Both adversity and positive outcomes interact with the individual and what institutes adversity and a positive outcome to a specific individual. What equates to an adverse situation or risk for one individual may be different to another individual and the individual brings certain individual factors and predispositions both positive and negative that interrelate with both the adversity and the propensity for a positive outcome (Vella & Pai, 2019). The definitions of resilience above emphasize two core concepts, which are, that the person has experienced serious risk and has demonstrated positive functioning in some way.

### **2.2.2 Conceptualizing Teacher Resilience**

The term resilience is commonly used in everyday language and so it is important to clarify what ‘resilience’ means in the context of the teaching profession (Mansfield, *et al* 2016). Teacher resilience is better defined as the capacity to manage the unavoidable uncertainties characteristic of the realities of teaching (Gu & Day, 2013) and to maintain equilibrium and a sense of commitment and agency (Gu & Day, 2013). In recent years researchers have begun to conceptualize resilience from a social-ecological perspective whereby resilience is defined “as a

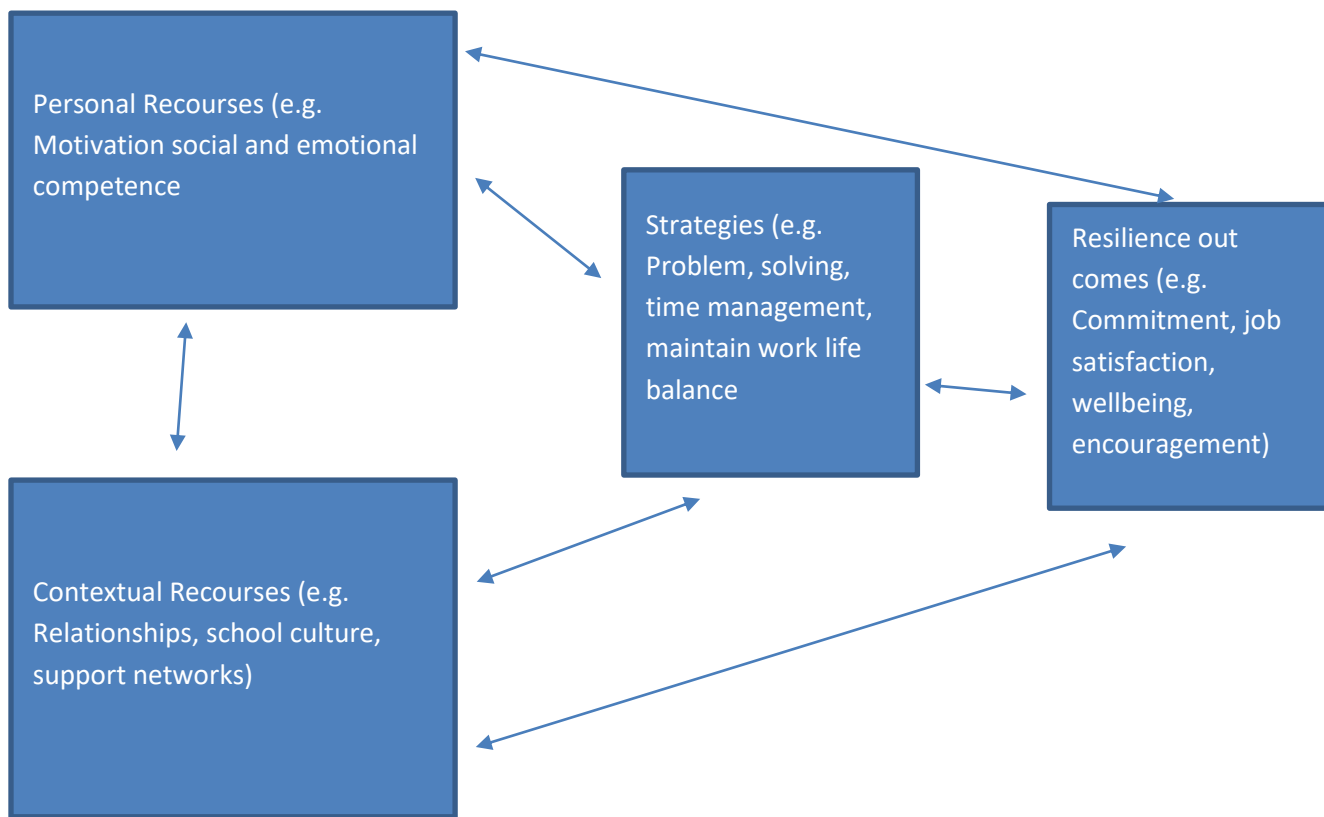
set of behaviors overtime that reflect the interactions between individuals and their environment, specifically the opportunities for personal growth that are available and accessible” (Ungar, 2012:35). Based on empirical research (Mansfield, *et al.*, 2012; Mansfield, *et al.*, 2014) conceptualize teacher resilience as a capacity, a process and an outcome. In the context of the teaching profession, resilience may be conceptualized as a capacity, a process and an outcome. Resilience involves the capacity, of an individual teacher to harness personal and contextual resources to circumnavigate through challenges. In the context of this study, resilience is the dynamic process whereby characteristics of individual student teachers and their personal and professional contexts interact over time as student teachers use particular strategies to enable the outcome of a student teacher who experiences professional engagement and growth, commitment, enthusiasm, satisfaction and wellbeing (Beltman, 2015). Student teachers may develop a capacity for resilience through building personal resources (for example, motivation, social and emotional competence), and understanding ways to mobilize contextual resources (for example, relationships, and support networks). Student teachers may develop a range of adaptive coping strategies (for example, problem-solving, time management, maintaining work-life balance) to manage challenges with a view to maximizing adaptive, resilient outcomes (for example commitment, job satisfaction, well-being, engagement) (Mansfield, *et al.*, 2016).

Hiver (2018) defines teacher resilience as a teacher using all the resources accessible to maintain personal well-being alongside professional productivity in the face of adversity and detrimental conditions. Gu & Day, (2013:26) have defined teacher resilience as “the capacity to maintain equilibrium and a sense of commitment, agency and moral purpose in the everyday worlds in which teachers teach”. Recently, teacher resilience has been acknowledged as a critical non-cognitive attribute of trainee teachers (Klassen, *et al.* 2018). Teacher resilience research has flourished over the past 15 years and studies have shown resilience related to plentiful positive outcomes for teachers including job satisfaction, commitment, efficacy, engagement, motivation, well-being and a positive sense of identity (Day and Hong, 2016; Day & Gu, 2014; Papatraianou & Le Cronus, 2014).

Ungar (2012) shares a social-ecological view of resilience and the view of resilience as the capacity of an individual teacher to harness personal and contextual resources to navigate through challenges. Teacher resilience is the active process whereby characteristics of individual

teachers and their personal and professional contexts interact over time as teachers use particular strategies to enable the outcome of a teacher who experiences professional engagement and growth, commitment, enthusiasm, satisfaction, and well-being (Beltman, 2015; Mansfield, *et al.*, 2016b). Teacher resilience is closely related to adaptive functioning; a resilient teacher is more self-efficacious, makes fewer excuses, postpones less and takes care of themselves (Bowles & Arnup, 2016).

**Figure 2.2.3 The teacher resilience process.**



*Adapted from Mansfield et al., (2016)*

Figure 2.2.3 shows the process of resilience whereby personal resources related to resilience (for example, motivation, social and emotional competence) and contextual resources (for example, relationships, school culture, and support networks) interact as individuals harness resources and use particular strategies (for example, problem-solving, time management, maintaining work-life balance) to enable resilience outcomes (for example, commitment, job satisfaction, wellbeing, engagement). The resilience outcomes influence future resources and strategies and so resilience

grows with experience and overtime (Mansfield, *et al.*, 2016). The bi-directional arrows in Figure 2.2.3 also illustrate that the resilience process may not necessarily be stringently linear, but that resources and strategies interact with each other in cycles over time, before resulting in adaptive outcomes. Resilience is moulded by individual situational and broader contextual characteristics that interrelate in dynamic ways to provide risk (challenges) or protective (supportive) factors. Individuals drawing on personal and social resources, not only “bounce back” but are able to flourish professionally and personally, experiencing job satisfaction, positive self-beliefs, personal wellbeing and continuing commitment to the profession (Wosnitza, *et al.*, 2018).

A social-ecological view of resilience enables resilience resources at various system levels to be examined, takes into account the role of, and interfaces between both person and context factors. This view aligns with Masten’s (2014) description of the resilience process as involving “many systems within the individual as well as many other systems at different levels of function that are frequently interacting.” Recent research provides emerging evidence that resilience-related skills and strategies can be enhanced during pre-service teacher education (for example, Beltman, *et al.* 2018); Peixoto, *et al.* 2018). There is also some support for the view that professional learning opportunities for in-service teachers may also play a role in supporting teacher resilience throughout the career span (for example, Gibbs and Miller, 2013).

#### **2.2.4 Notion of Teaching Practice**

A perusal of the literature revealed that Teaching Practice is a form of ‘work-integrated learning’ that is described as a period of time student teachers are working in the schools to receive specific on-the-job training in order to apply theory into practice (Mavundutse, *et al.*, 2014). Teaching practice is an indispensable and obligatory component of the teacher training programme (Ngara, *et al.*, 2013). It is vital element of becoming a teacher which provides an opportunity for student teachers to gain knowledge in the real teaching and learning milieu. Teaching practice is an opportunity for student teachers to understand the role and operation of how the business of schooling is done (Aglazor, 2017) and it provides a challenging yet rewarding experience of working with learners in actual classrooms and gaining professional competences. Menter (1989) as cited in Aglazor (2015) reiterates the concept of teaching practice as an experiential practice by highlighting the literature associated with the

apprenticeship model to the notion of teaching practice. Regardless of how teaching practice may be envisioned, the concept of teaching practice is deep-rooted in experience-based learning initiated by John Dewey (1938), Vygotsky's (1978) social cognitive theory and is founded on the premise of situated learning (Aglazor, 2015). During teaching practice student teachers become initiated into the rigours of the multifaceted teaching profession where student teachers are prepared for their role in the usage of teaching approaches, teaching strategies, teaching principles, teaching techniques, co-curricular activities and general school life (Rembe, 2016). Student teachers perceive teaching practice as the core of their foundation for the teaching career since it provides for the real encounter between student hood and initiation into teaching (Quick & Suborger, 2005 as cited Rembe, Shumba & Mavuso, 2016). As a result, teaching practice creates a mixture of anticipation, anxiety, excitement and uneasiness in the student teachers as they commence their teaching practice (Rembe, Shumba & Mavuso, 2016). Thus, there is need for this study to explore student teachers' resilience on teaching practice in COVID-19 era so as to establish the resilience outcomes of student teachers.

Within a complex world full of daily trials and unexpected challenges, human beings encounter a plethora of stressful situations (Pauley, McKim & Hodbod, 2019). All teacher education courses include periods of practical experiences in schools and this can be an exclusively stressful time as student teachers encounter the realities of teaching (Mansfield, *et al.*, 2016). Student teachers on teaching practice's stressors and anxieties originate from subject content knowledge, instructional strategies, workload, classroom discipline, and relationships with learners, cooperating teachers and parents (Gutierrez, *et al.*, 2016). Thus, this research study seeks to ascertain the influence of the above stressors on student teachers' resilience on teaching practice in the COVID-19 era. Stress contributes to health problems worldwide and its presence is felt in the home, office, industry, and academic environments (Ekpenyong, *et al.*, 2013).

### **2.2.5 Rationale for Teaching Practice**

There is a growing body of literature that suggests that the teaching practice phase affords student teachers opportunities to cross-examine and integrate theory and practice and work collaboratively with and learn from qualified teachers (Mavundutse, *et al.*, 2014). During teaching practice, student teachers are expected to infuse theoretical knowledge acquired in teachers' college lectures with the practical experience they gain in schools (Fraser, *et al.*, in

Ntsaluba & Chireshe, 2013). The rationale for teaching practice is to nurture numerous capabilities in student teachers which include among others, relational, instructional, intercultural and mental proficiencies (Rembe, Shumba & Mavuso, 2016). Furthermore, it is through teaching practice experience that student teachers develop important professional knowledge such as knowledge of people, knowledge of teaching, professional content knowledge, knowledge of themselves, self-control and interpersonal sensitivity (Chimhenga, 2017). Teaching practice is a time when student teachers evaluate their own teaching experiences through interactions with qualified teachers, learners and college lecturers, and through self-reflection, implement a variety of approaches, strategies and skills with a view to bringing about meaningful learning (Komba and Kira, 2013). Teaching practice affords the student teachers to develop skills such as independent problem-solving, working collegially with fellow student teachers and mentors, and developing professional values and attitudes (Chimhenga, 2017).

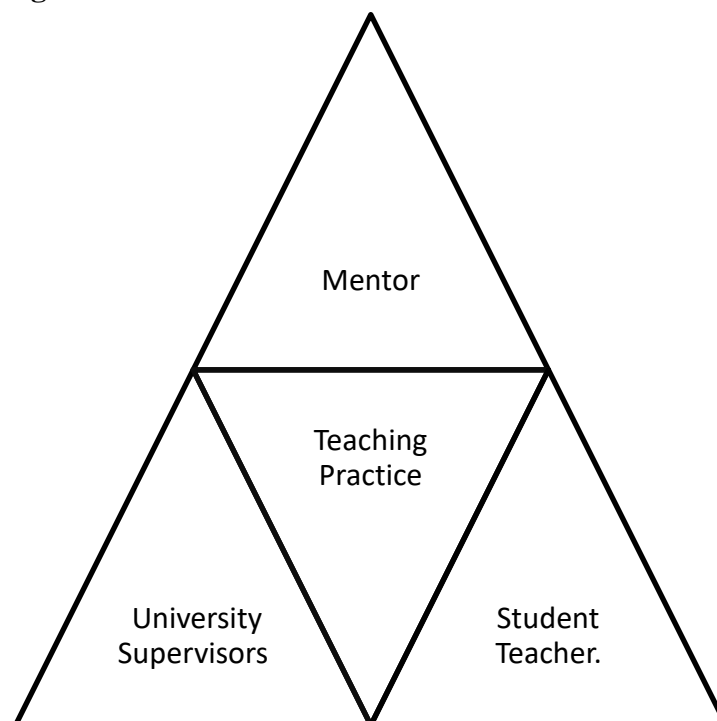
The National Commission for Colleges of Education (NCCE, 2015) outlined sets of objectives that have been established for why the teaching practice component is mandatory in teachers training programs:

- To expose student teachers to real-life classroom experiences under the supervision of professional teachers.
- To provide a forum for student teachers to translate educational theories and principles into practice.
- To enable student teachers to discover their own strengths and weaknesses in classroom teaching and provide opportunities to enable them to address their weaknesses and enrich their strengths.
- To familiarise student teachers with real school environments as their future work place.
- To provide student teachers with an opportunity to further acquisition of professional characteristics and experience for full-time teaching after graduating.
- To help student teachers develop a positive attitude towards the teaching profession.
- To serve as a means of assessing the quality of training provided by teacher training institutions (Aglazor, 2017).

Thus, the teaching practice programme at any given institution of higher education is a well-structured programme designed to provide an opportunity to develop and assess student teachers' competence in an actual classroom within school settings (Aglazor, 2017). In light of this vital purpose of the teaching practice phase, it is vital to explore the promotional factors of the resilience of student teachers on teaching practice in the COVID-19 era specifically in the context of Masvingo District of Zimbabwe.

In this study, teaching practice is a culminating point where major players - the college-based supervisors, school-based supervisors, university supervisors, students' mentors and the student teacher interface to determine the quality of experience the student teacher will take away. The teaching practice exercise becomes the foundation on which the student teacher once certified and employed builds their professional identity (Aglazor, 2017). The success of teaching practice depends on the teamwork among the supervisors, the students' mentors and the student teachers and the primary goal is to guide the student teacher to successful completion of teaching practice.

**Figure 2.2.6 Teaching Practice Triad**



*Adapted from Aglazor (2017).*

Figure 2.2.6 above shows the teaching practice triad, highlight the pillars of student teacher practicum. Teaching practice is the central element of the teacher education programme geared to enable student teachers to learn about teaching skills, strategies and classroom practices (Komba & Kira, 2013). Mentors are integral to the successful professional teacher education programme. It is therefore necessary that student teachers are attached to knowledgeable, competent and concerned mentors who can spearhead the professional growth and development of student teachers. Furthermore, mentors guide student teachers during their teaching practice in areas of instructional design, classroom management, assessment and the broader concept of being a teacher (Aglazor, 2017). The supervisors should be conversant with the professional teacher training and performance experts charged with evaluating and assessing student teachers during teaching practice (Aglazor, 2017). Teaching practice supervision seeks to improve the quality of teaching offered by student teachers and it promotes self-reflection and continuous improvement in the development of pedagogic skills among student teachers (Chimhenga, 2017). In the context of this study, supervisors comprise college lecturers, school administrators, students' mentors and university lecturers.

### **2.2.7 Teaching Practice in Zimbabwe**

The model of teaching practice varies according to national and institutional prescription. A comparative study on teacher education by Yadav (2011) in Pakistan, India, Bangladesh and Sri Lanka revealed that the duration and organization of teaching practice varied from country to country (Rembe, 2016). In Zimbabwe, there are eighteen (18) primary school teacher training colleges. All eighteen (18) teachers' colleges are affiliated to the University of Zimbabwe under the Scheme of Association offering pre-service Diploma in Education (Primary). The primary school teacher education programme in Zimbabwe follows a 3.3.3 model of training where student teachers spend three terms on teaching practice (Rembe, 2016; Chivore, *et al.*, 2015; Mavhundutse *et al.*, 2014). The first three terms (one year) mark the first academic residential phase in college, followed by three terms (one year) of teaching practice and the final three terms (one year) last academic residential phase in college where student teachers reflect on their teaching practice experiences. To achieve the standard required for qualified teachers in Zimbabwe, student teachers are required to do Teaching Practice for three terms (Mavundutse, *et al.*, 2014). The fundamental aim of teaching practice in Zimbabwe is to introduce student teachers to and prepare them for the teaching profession (Ntsaluba & Chireshe, 2013). Thus, as a result,

student teachers may not graduate in Zimbabwe with a Diploma in Education certificate without having gone through the rigours of teaching practice. Student teachers are deployed in practicing schools where they are attached to qualified and experienced teachers as their mentors. The term ‘mentor’ refers to individual teachers who are given the responsibility of guiding and supporting student teachers on teaching practice in their development of practical knowledge for teaching (Wetzel, *et al.*, 2017). College lecturers, visit the student teachers in their practicing schools to supervise and examine the student teachers’ overall teaching practice performance for student teacher to complete teaching practice (Konyana & Motalenyane, 2022). Each student teacher should be supervised at least three (3) times by the college lecturers during the teaching practice period. School-based supervisors, these are; the school head, deputy school head and students’ mentor should also supervise each student teacher for a minimum of three (3) times during the teaching practice period. The computation of the internal mark comprises three (3) college-based supervisors’ marks and two (2) school-based supervisors’ marks. The college-based supervisors’ marks constitute 70% while the school-based supervisors’ marks constitute 30% of the internal mark.

Towards the end of the teaching practice period, the student teachers are externally examined by the external assessors from the Department of Teacher Education, University of Zimbabwe (Chivore, *et al.*, 2015). External examining is mandatory in all teachers’ colleges under the University of Zimbabwe Scheme of Association. The team of external examiners critically analyses the internal examiners’ reports and teaching practice policies. Student teachers are externally examined through critical analysis of their teaching practice records and live lesson execution based on the Department of Teacher Education's established criteria for the supervision of practical teaching (Department of Teacher Education, 2015). The external assessors’ mark is final so the mark determines whether the student teacher passes or fails teaching practice. It is therefore in this regard, that this study sought to explore the resilience of student teachers on teaching practice in COVID-19 era in Masvingo District, Zimbabwe.

When schools closed in Zimbabwe on 24 March 2020, the Ministry of Primary and Secondary Education introduced alternative learning to ensure the continuity of education, these included using radio and television programmed lessons as well as online platforms such as ZOOM, Google classroom and WhatsApp (Chitanana, 2021). Internet penetration in Zimbabwe stood at

33% by 2020 so Zimbabwe learners are therefore at a disadvantage in terms of access to digital and distance learning (UNICEF, 2020). There are concerns that online learning may be a sub-optimal substitute for face-to-face instruction, given the absence of universal access to ICT infrastructure and lack of adequate preparation among teachers as well as learners for the unique demands posed by online teaching and learning (OECD 2020). While the colleges and the universities could make arrangements for teaching and learning to continue via e-learning platforms, the same could not be done for student teachers on teaching practice because schools remained closed due to the COVID-19 pandemic, thus making it impossible lecturers to continue with teaching practice supervision (Moyo, 2020).

### **2.3 Teaching practice generated stressors in the COVID-19 era**

In this study, the researcher attempts to review literature related to teaching practice-generated stressors experienced by student teachers on teaching practice in the COVID-19 era. It is important for this study to specify the teaching practice stressors induced by COVID-19 pandemic as they have an influence on the resilience of student teachers on teaching practice in the COVID-19 era. A new coronavirus that previously had not been identified in humans emerged in Wuhan, China in December 2019. Human coronaviruses can cause mild diseases similar to the common cold, while others cause more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Cute Respiratory Syndrome (SARS) (World Health Organization, 2020). The COVID-19 pandemic has greatly strengthened, with the number of confirmed cases worldwide on a continuously increasing trend and hitting new highs almost on a daily basis. Since May 2020, the COVID-19 pandemic has continued to rage around the world (The Committee for the Coordination of Statistical Activities, 2020).

A review of extensive literature indicates that the COVID-19 pandemic has critically affected the worldwide education sector, potentially compromising the right to education (Matimire,2020). Student teachers on teaching practice are exposed to dangers that put them at risk of infection with the outbreak of the COVID-19 pathogen. Dangers include pathogen exposure, long working hours, psychological distress, fatigue, burnout, stigma and physical and psychological violence (World Health Organization, 2020). The COVID-19 pandemic affected two aspects of student teachers on teaching practice development. The two aspects are social development due to physical detachment from colleagues and the wider school community and personal development

because of the complexity of managing feelings associated with becoming a teacher in such extraordinary times (Sepulveda-Escobar and Morrisson, 2020). Dvir and Schatz-Openheimer (2020) assert that the challenges facing student teachers' professional development can be divided into personal-emotional, pedagogical-didactic and ecological-systematic organisational domains. Being at home with families at home while simultaneously engaging with learners on meeting platforms potentially caused an emotional overload among student teachers. School closures marked the removal of all responsibility as schools physically shut down and student teachers' mentors took charge of online learning (White & Mc Sharry, 2021). Some student teachers continued to engage with their classes but experienced a diminishment of responsibilities, as any work student teachers wanted to send had to be sent through student teachers' mentors. Diminishments in responsibilities of the student teachers lead to feelings of disempowerment and uncertainty (White & McSharry, 2021). School closures resulted in some student teachers being stripped of their teacher identity, with classes they had taught, being fully or partially removed from them. Feelings of isolation and detachment experienced by student teachers as a result of the removal of human contact and support plunged the student teachers into a state of heightened liminality (White & Mc Sharry, 2021).

Since the global outbreak of SARS-CoV-2 was declared a pandemic (World Health Organization, 2020) various measures, for example, isolation, avoiding crowds, and intensification of hygiene behaviors such as proper hand washing, social distancing, confinement, travel restrictions have been implemented to effectively combat COVID-19 to preserve lives (Cruz, Santos, Cervantes & Juarez, 2020). The major impact of COVID-19 restrictions was the closure of schools, postponement or cancellation of all campus-related academic and social activities disrupting over 1.2 billion students' academic pursuits worldwide (UNESCO, 2020; Capone, Caso, Donizzetti & Procentese, 2020). The unprecedented shift from face-to-face teaching to online teaching posed new challenges that included the development of alternate instructional delivery models and self-directed management of the studies for student teachers and learners with extensive uncertainty, anxiety and panic (Capone, Caso, Donizzetti & Procentese, 2020). For student teachers on teaching practice, the insight of being infected with the coronavirus from the learning environment threatens not only their psychological well-being but also their physical, intellectual, emotional and occupational well-being (Patrick, Henkhaws, Zickafoose, Lovell, Halvorson, Loch, Letterie & Davies, 2020). COVID-19 related studies have

also shown that student teachers' levels of stress, anxiety, and depression worsened compared to that before the COVID-19 pandemic (Elmer, Mepham, Stadtfield & Caprano, 2020) for example, Cao *et al* (2020) reported that uncertainties over economic impact and deferments in academic activities were positively related to anxiety symptoms. In Ghana, like other developing countries, the teaching-learning environment amidst COVID-19 is further heightened by a lack of adequate personal protective equipment (PPEs), teaching and learning materials and infrastructure, facilities, technical equipment and other logistical support ( UNESCO, 2020; UNICEF,2020; Agormedah, *et al.* 2020) so the psychological pressure and burden could be enormous for both lecturers and student teachers in the light of the ongoing pandemic and context-specific inadequacies (Pragholapati, 2020).

The 2019 coronavirus pandemic (COVID-19) and the subsequent confinement have impacted mental health and the academic environment (Morales-Rodriguez, 2021). Fear is a human emotion with an adaptive function and it helps cope with certain threats, however, it can become maladaptive depending on the situation, intensity and frequency (Valero, 2020). When one experiences the fear of the unknown, there is, somehow, a sense that the perceived information is not sufficient for coping with the situation, at any point of processing or level of awareness (Valero, 2020, Carleton, 2016). Several studies reported that the COVID-19 pandemic has generated an increase in fears of COVID-19 that contribute to growing levels of stress, anxiety and depression (Valero, 2020; Pieh, *et al.*, 2020; Wang & Zhao, 2020) and traumatic stress (Huremovic, 2019; Ramirez-Ortiz, 2020; Sun, 2021). The COVID-19 pandemic has been associated with distress, fear of infection, depression and insomnia both in lecturers and student teachers who may experience increased levels of stress associated with increased suicidal behaviour (Sher, 2020). Longer duration of quarantine may be explicitly related to poorer mental health, which contributes to frustration, anxiety, and boredom due to the isolation that interferes with daily routine (Brooks, 2020). Other COVID-19 induced stressors include prolonged quarantine, fear of infection, frustration, boredom, inadequate provision of supplies, inadequate information and financial loss (Wakui, 2021). The purpose of a 2004 study by Mavundutse was to find out sources of stress among third-year student teachers at Mkoba Teachers' College in Zimbabwe. The findings revealed four main sources of stress; Theory of Education assignments, examinations, work load and being non-resident. In a related study, Nyabadza & Mutendera (2014) examined some forms of stress, their causes and the means of dealing with the stress from

the perspectives of female student teachers, mentors and lectures at Marymount Teachers' College in Zimbabwe. The research reported the common forms of stress to be: inadequate support from home, ineffective mentorship, high college expectations and harassment by lecturers. The research studies did not make reference to teaching practice stressors induced by the COVID-19 pandemic. Thus, there is a need for this study to investigate the teaching practice stressors caused by the outbreak of COVID-19 pandemic and their influence on the resilience of student teachers on teaching practice particularly in Masvingo District, Zimbabwe.

Unlike other academic modules that could be completed via online and distance education, teaching practice, being a practical undertaking in the actual world of the classroom presented unique challenges (Moyo, 2020). Teaching practice occurs when schools are open thus forcing the teachers' colleges to organize teaching practice programs in accordance with the school calendar. College lecturers could not continue with teaching practice supervision because the schools have remained closed due to lockdowns used to control the spread of COVID-19. A survey conducted during the last week of March 2020 among student teachers in the United States of America revealed that 75% of the student teachers have experienced anxiety and depression because of COVID-19 pandemic due to the closure of schools (UNESCO, 2020). In line with the above argument UNESCO (2020) reported that the closure of schools has augmented an abrupt entry into a new era of learning, that is, the demand for almost immediate digital transformation of learning not only requires the incorporation of technologies but also require the creation or modification processes and abilities of people with the appropriate capacities and skills to develop said processes and technologies. A study by Front Psychol (2022) revealed that the COVID-19 pandemic has brought online learning as the new norm in education, which involves many issues, mostly in the quality of online education since the quality of teacher education is being questioned, especially in imparting adequate Technological Pedagogical Content Knowledge, which seems to be lacking in preparing teachers for sudden online learning. Research findings from a 2022 study by Front Psychol, showed that the level of Technological Pedagogical Content Knowledge and readiness of student teachers were high, especially for Technological knowledge, however, the same study revealed that Technological Pedagogical Content Knowledge should look into the online teaching readiness of student teachers so that they are well equipped with the online pedagogical knowledge for effective teaching and learning. UNESCO (2020) reported that online education lacks quality because

teachers are unprepared for online pedagogical knowledge. A study by Dalal., *et al.*, (2021) revealed that student teachers had difficulties adopting technology due to limited resources. Until the outbreak of the COVID-19 pandemic, teaching placing student teachers in teaching practice schools where they were required to teach learners and witness their mentor teachers' instructional practices so as a result student teachers could not complete their teaching practice in their placement schools (Kosar, 2021).The disruption of learning may exacerbate student teachers' delicate condition and force them to drop out, thereby yet again, perpetuating a situation of exclusion because of the inequality that is characteristic of the higher education system (Ferreira, 2017).

When schools first closed down, online learning went from weeks to months and student teachers had many challenges coming their way (Trybus, 2020). Student teachers had no precise date of in-person return, so they had to make do with whatever technology tools they had for online learning. None really knew what to do but student teachers had to create lessons in a completely new way. As hard as it has been, student teachers have been forceful to keep instruction as top quality as possible (Meaghan, 2021). Since learners and student teachers were not in the same room, student teachers were still trying to create lessons that would be engaging. Kaden's (2020) study revealed that confined to working from home, with existing lesson plans no longer adequate, challenged to quickly learn new technologies and removed from learners themselves, many students experienced the single most traumatic and transformative event of the modern era. Most student teachers' initial reactions to the shutdown involved panic and rush (Kim & Asbury, 2020). Student teachers who had never used technology for instruction had to quickly adapt and begin using it full-time.

A study by Meaghan (2021) established that with the onset of COVID-19, student teachers had to immediately switch their instruction to an online format in the snap of a finger however not every student teacher was as open and flexible to online instruction due to the fact that they were not accustomed to this sort of format. Regardless of comfort level, student teachers had no choice but to plunge headfirst into a pool of technology. In line with the above revelations Nasr's (2020) study reported that some student teachers were already comfortable with the use of technology, while others rarely used online teaching tools to direct student learning in the traditional face-to-face classroom. Although technology has been a lifesaver for teachers during

this unexpected pandemic, there are still student teachers who never became familiar with technology and never planned on using it for instruction on a daily basis. Not all learners will have equal access to online learning and without additional action, this risks further opening up already existing attainment gaps, with the impacts felt the most by those from the poorest backgrounds (Cullinane and Montacute, 2020). While teachers are worried about their learners' well-being during the COVID-19 pandemic, they are also worried about their own families and even their own health (Koerner, 2020). Little is known about the effectiveness of the implementation of e-learning by student teachers on teaching practice in Zimbabwe as an alternative means of teaching due to the outbreak of COVID-19 pandemic. Therefore, this study endeavors to close the gap in the literature by capturing the views of the student teachers and students' mentors on the effectiveness of the use of e-learning by student teachers on teaching practice in COVID-19 era.

A survey by The Zimbabwe Human Rights Commission (ZHRC) (2020) reported the existence of a gap in the distribution of information by the Ministry of Primary and Secondary Education to teachers, learners, parents and guardians across Zimbabwe. Most educators were not aware of the preliminary measures which needed to be put in place ahead of re-opening schools, the time frame, and actual dates of re-opening, and lacked information regarding the testing of staff and the learners. A research study by ADEA, AU/CIEFFA, and APHRC (2021) revealed that in terms of finance for the re-opening of schools during the COVID-19 pandemic, most African countries had inadequate internal funding to facilitate compliance with the World Health Organization protocols. In support of the above findings (ZHRC, 2020) revealed that most schools did not have enough finances to put in place precautionary measures against COVID-19 before schools open. Pre-existing challenges with infrastructure was another challenge, especially in schools that are already overcrowded, for example, Ghana, Nigeria and Rwanda, have average class sizes in the primary school of 39, 51 and 43 respectively (ADEA, AU/CIEFFA, and APHRC, 2021). On the contrary, a research study by Ezeonu, Uneke & Ezeonu (2021) revealed that in China, Taiwan, South Korea, Norway, Denmark, Germany, Australia and Israel started with phased re-opening, reduction of class sizes, wearing of masks were mandatory and hand hygiene was ensured. There is therefore, a need for this research study to assess the feasibility and effectiveness of guidelines for safety put in place by the government of Zimbabwe in preparation for schools re-opening during COVID-19 pandemic.

In Zimbabwe, there are eighteen (18) primary school teacher training colleges. All eighteen (18) teachers' colleges are affiliated to the University of Zimbabwe under the Scheme of Association offering pre-service Diploma in Education (Primary). The primary school teacher education programme in Zimbabwe follows a 3.3.3 model of training where student teachers spend three terms on teaching practice (Chivore, *et al.*, 2015, Mavundutse, *et al.*, 2014). The first three terms (one year) mark the first academic residential phase in college, followed by three terms (one year) of teaching practice and the final three terms (one year) last academic residential phase in college where student teachers reflect on their teaching practice experiences. In a study by Mavundutse *et al.*, (2014) it was established that to achieve the standard required for qualified teachers in Zimbabwe, student teachers are required to do Teaching Practice for three terms. On the other hand, a study by Ntsaluba & Chireshe (2013) revealed that the underlying aim of teaching practice is to introduce student teachers to and prepare them for the teaching profession. College lecturers and external assessors from the University of Zimbabwe have to visit the student teachers in their practicing schools to supervise and examine the student teachers' overall teaching practice performance for a student teacher to complete teaching practice (Konyana & Motalenyane, 2022). Towards the end of the teaching practice period, the student teachers are externally examined by the external assessors from the Department of Teacher Education, University of Zimbabwe teaching the learners (Chivore, *et al.*, 2015). It is in this regard that this study sought to establish how the lack of teaching practice supervision and external examination of student teachers on teaching practice in the specific context of Masvingo District of Zimbabwe affected the resilience of the student teachers in the COVID-19 era.

#### **2.4 Factors that hinder the resilience of student teachers on teaching practice in the COVID-19 era.**

In this section of the study, the researcher deliberated on the literature from a broad perspective that explores the personal and contextual factors that hinder the resilience of student teachers on teaching practice in COVID-19 era. The world related to education is challenging at a more rapid rate than ever before with advances in technology and information access that are greatly impacting ways of knowing and learning. These challenging situations have been exacerbated by the outbreak of COVID-19 hence the need for this study to interrogate the actual factors which hinder the resilience of student teachers on teaching practice. Teacher educators are tasked with the large duty of preparing teachers for a very different world than the one they were prepared

for (Thieman, Max & Kitchel, 2014). Teachers are increasingly expected to do more with less as the general public and media are clamouring for higher student performance while national and state-level funding cuts are observed on a regular basis. Within education, many factors have a cumulative effect on student-teacher stress, which can then be worsened by stressful experiences within the context of a student-teacher’s personal life. Research findings by Thieman, Max & Kitchel (2014) showed that individual stress can result in negative health outcomes, reduced job performance and an undesirable effect on organisational health.

Table 2.4.1 shows the individual and contextual risk factors identified by Beltman *et al* (2011).

**Table 2. 4.1 Individual and Contextual risk factors that hinder resilience.**

Individual risk factors	Contextual risk factors
<ul style="list-style-type: none"> <li>• Negative self-beliefs and lack of confidence.</li> <li>• Reluctance to seek help.</li> <li>• Conflict between personal beliefs and practices.</li> </ul>	<ul style="list-style-type: none"> <li>• Behaviour management</li> <li>• Meeting the needs of disadvantaged students</li> <li>• Heavy workloads and time required for non-teaching duties.</li> <li>• Lack of resources.</li> <li>• Relations with students’ parents.</li> <li>• Difficult schools or classes.</li> </ul>

*Adapted from Beltman et al (2011) in Beltman (2020).*

When thinking of resilience, researchers with a person-focused perspective have concerns such as the negative impact on educators of stress and emotional labour (Ghanizah & Royaei, 2015). Skaalvik & Skaalvic, (2016) further explained that if individual student teachers experience stress and burnout, it can lead to a loss of satisfaction with their chosen career and a reduced sense of wellbeing. Table 2.4.1 shows individual and contextual risk factors which hinder resilience in student teachers on teaching practice identified by Beltman (2020). In the light of the identified individual and personal risk factors presented in Table 2.4.1, this study seeks to determine their effects on the resilience of student teachers on teaching practice during the COVID-19 era.

Table 2.4.2 presents the risk factor that hinder resilience identified by Soleas and Hong (2020).

**Table 2.4.2 Risk factors that hinder resilience**

<p>Personal Risk Factors</p>	<p>a) Individual Risk Factors</p> <ul style="list-style-type: none"> <li>• Confidence or negative self-beliefs</li> <li>• Difficulty asking for help</li> <li>• Perceived conflict between personal beliefs and practices being used.</li> </ul> <p>b) Contextual Risk Factors</p> <ul style="list-style-type: none"> <li>• Academic workload</li> <li>• Time table issues</li> <li>• Family contextual constraints including negative pressure to leave teaching</li> <li>• Lack of infrastructure at home</li> <li>• Balancing work and family commitments</li> </ul>
<p>Classroom/ school context challenges</p>	<ul style="list-style-type: none"> <li>• Classroom management</li> <li>• Disruptive students</li> <li>• Meeting the needs of disadvantaged learners</li> <li>• Unsupportive/ disorganised leadership staff</li> <li>• Lack of resources/ equipment</li> <li>• Relationships with students’ parents</li> <li>• Social isolation</li> <li>• Scrutiny of peers, parents, principal</li> <li>• Using materials required by others</li> </ul>
<p>Professional Work Challenges</p>	<ul style="list-style-type: none"> <li>• Heavy workload</li> <li>• Lack of time</li> <li>• Non-teaching activities</li> <li>• Difficult schools, courses or classes</li> <li>• Externally imposed regulations</li> <li>• Curriculum/ classroom knowledge</li> <li>• Unsupportive/ no mentor</li> <li>• Low salary/ poor funding</li> </ul>

*Adapted from Soleas and Hong (2020).*

In Table 2.4.2, Soleas and Hong (2020) identified personal risk factors, contextual risk factors, classroom/ school context challenges and professional work challenges, which hinder resilience.

It is the trust of this study to establish the influence of the risk factors identified in Table 2.4.2 on the resilience of student teachers on teaching practice in the COVID-19 era. Table 2.4.3 shows challenges of early career teachers identified by Beltman (2021).

**Table 2.4.3 Challenges of early career teachers by Beltman (2021).**

<b>Personal</b>	<b>Interpersonal</b>	<b>Infrastructure</b>
Work-life balance e.g., no time for hobbies	Family and friends e.g., less contact	Policies and practices e.g., poor housing
Personal attributes e.g., perfectionist	Teachers and administration e.g., lack of recognition or support	School organisation e.g., moving rooms, lots of meetings
Knowledge e.g., lack of reporting	Students e.g., challenging behaviour, multiple needs	Classroom resources e.g., lack of teaching materials and resources
Feel overwhelmed e.g., trying to juggle fifteen thousand balls, 'it's like a roller coaster'.	Parents e.g. parent complains	Preservice preparation e.g., teaching in a different area, lack of administration experience

Beltman (2021) identified the challenges in early career teachers using the following categories, these are, personal challenges, interpersonal challenges and infrastructure challenges as shown in Table 2.4.3. With the outbreak of the COVID-19 pandemic, there is a need for this study to establish how the identified personal and contextual risk factors hinder the resilience of student teachers on teaching practice in the context of Masvingo District, Zimbabwe since Beltman's (2021) and Soleas & Hong's (2020) studies did not refer to student teachers on teaching practice in the COVID-19 era.

A review of the literature reveals that some of the challenges facing student teachers on teaching practice include tensions, varied experiences, opinions, beliefs and conceptions of teaching and

learning, basic understanding of the school culture and context for teaching and learning, interaction with learners, awareness of teaching skills and techniques, reflective thinking during initial stages of the pre-service academic programme and teaching practice (Takaoglu, 2017; Abas, 2016). Some of the current development in education includes technology integration as a requirement in the curriculum and outcomes-based education. In one of the studies, Napanoy, Gayagay & Tuazon (2021) reported that technology integration in the curriculum and instruction will require student teachers to conduct alternative learning delivery systems or have their lessons through learning management systems. Takaoglu (2017) stressed the need to learn how to use technology effectively and efficiently because he found that technology integration is the problem encountered by the student teachers on teaching practice before and during lesson activities.

Several research studies revealed that leading problems of student teachers on teaching practice are on the learning environment, mentors, peers, learners, assigned tasks (Abas, 2016; Wells, Hainline and Smalley, 2019), lack of school engagement, language barrier and lack of resources (Reis, 2012). Student teachers had difficulties in lesson planning, classroom management and use of technology. The student teachers felt belittled in terms of classroom management as learners behave well in the presence of the class teacher and misbehave when their class teacher is out (Napanoy, Gayagay & Tuazon, 2021). Koksai & Genc's (2019) study established that the primary challenges hindering the resilience of student teachers on teaching practice were related to classroom management issues. They reported that student teachers had serious difficulties in keeping the classroom quiet and on task. Dealing with reluctant learners and their disruptive behaviors were also among the challenges reported by the student teachers. One major concern reported by student teachers was managing time and being able to finish the lesson as it was planned and the problem of dealing with mixed-ability learners and using technology properly. A perusal of the literature confirms that the sudden metamorphosis of teaching activity from the face-to-face model to the online modality reveals the existence of three gaps (Miralles-Martinez, 2014): the access gap, that is, having or not having access to connection and technological devices; the use gap, that is, time of use and its quality; and the gap in teacher skills, availability of resources, and adaptation of online platforms to support teaching. The digital gap makes the distances between families with more and fewer resources ever greater, as is happening in the period of confinement (Hodges *et al*, 2020) The World Education Monitoring Report (Munoz-

Perez & Cubo-Delgado, 2019) concludes that only 40% of adults in upper-middle-income countries are able to send an e-mail with an attachment. Recent research shows shortfalls in relation to digital competence and low-medium teacher training, although teaching staff showed a positive attitude toward Information and Communication Technology (Fernandez-Enguita & Vazquez-Cupeiro (2017).

The study by Napanoy, Gayagay & Tuazon (2021) revealed that the present generation of student teachers are good at their subject competency but fail in their part of lesson delivery. There is a need for appropriate training that would lead to increasing the student teachers' level of knowledge and skills towards giving solutions to the difficulties encountered during teaching practice. The student teachers claim that they had problems with interpersonal relationships with their peers and as a result, student teachers tend to work by themselves. Student teachers on teaching practice experience inadequate instructional materials and crowded classrooms. This requires efficient and effective student teachers in order to make a classroom conducive to learning. Student teachers must be resourceful and creative in developing alternative materials and identifying appropriate strategies to be used in teaching. (Napanoy, Gayagay & Tuazon, 2021). A study by Rakicioglu-Soyalemez (2014) reported that student teachers were not contented with the assistance provided by mentors in terms of teaching strategies, problem-solving skills and new teaching ideas. The results of another study conducted by Coskun (2013) concur with the results of Yavuz (2011)'s study indicating that mentors felt themselves under pressure because of being observed by the student teachers and they found it difficult to cooperate and establish effective communication with the student teachers. Research studies on the personal and contextual risk factors that hinder the resilience of student teachers on teaching practice in the COVID-19 era are rare in Zimbabwe. In this case, therefore, there is a need to fill up the literature gap glaringly exposed by reviewed studies.

A study conducted by Thieman, Marx & Kitchel (2014) revealed that student teachers felt that they were adequately prepared for the content knowledge demands that would be placed on them while teaching in the classroom, however, many expressed uncertainties regarding their ability to relate their content knowledge and relevant personal experiences to their learners in an effective manner consistent with previous findings (Anderson, *et al.*, 2012). This indicates the importance of building a cognitive network in problem-solving skills through strengthening the student

teachers' abilities to recall prior experiences and activate previous knowledge. Student teachers expressed concern and uncertainty regarding the reality of the job and even indicated this as a factor that could counter their resilience. It is imperative that teacher development programs prepare future teachers for the expectations and demands of the profession (Thieman, Marx & Kitchel, 2014). A (2015) study by Roberts-Hull evaluated teacher education programs in some countries, including the United States of America and Australia identified common challenges that hinder the resilience of student teachers such as outdated teaching practices, insufficient subject matter knowledge and an inadequate link between theory and practice.

In a qualitative study conducted by Payant and Murphy (2012) on the roles and responsibilities perceived by mentors in the United States of America, researchers reported problems which negatively affect teaching practice such as difficulties in communicating with supervisors and unclear definitions of the mentors' roles and responsibilities. In a study conducted by Tok & Yilmaz's (2011) it was reported that student teachers complained about the biased and intolerant behaviors of their mentors as well as their indifference. Student teachers also added to their complaints that they were not treated like a teacher and were forced to fulfill the mentors' personal daily tasks. In addition, student teachers were not provided adequate feedback and support for their teaching (Koksal & Genc, 2019).

#### **2.4.4 Teaching practice supervision**

A study conducted by Konyana & Motalenyane (2022) on teaching practice supervision in the COVID-19 era showed that teaching practice supervision by both school-based supervisors and college lecturers encountered a number of challenges. Travel restrictions made it difficult for college lecturers to visit the student teachers in their practicing schools. Konyana & Motalenyane (2022) elaborated that supervision challenges arose particularly for student teachers who were in their final term of teaching practice since they had to be externally examined on teaching practice and a mark for the teaching practice component endorsed before they could embark on their final residential year. During teaching practice visits by college lectures, the learners were not available in the schools for the student teacher to be supervised while practically teaching. Even when schools re-opened, learners came to school on alternating days, in such cases some student teachers would not have learners to teach when college lectures visited for supervision which resulted in the student teacher being supervised through documentation. However, a study

by Moyo (2020) pointed out that the idea of document-based teaching practice supervision was not feasible as documentation only contributes a fraction of the competencies a student teacher should demonstrate in a single teaching practice supervision session. Moyo (2020) further explained that competencies such as class and classroom management and reinforcement techniques call for the physical presence of the learners so that live lesson execution is done for the supervisor to capture the dynamics of lesson delivery. In a similar study, Manu & Owusu-Ansah (2019) opined that the school closures due to COVID-19 robbed student teachers of the teaching experience they were supposed to get because experience is important in teaching skills acquisition and it is gained over a period of time.

Due to the outbreak of the COVID-19 pandemic, universities, colleges and schools were closed. Face-to-face teaching was transferred to online education including teaching practice. Within a short space of time, educators had to redesign and arrange an online teaching schedule so that student teachers could meet with the supervisors and also teach children online in order to meet the teaching practice requirements (Kim, 2020). A study by Tekel, Bayir & Dulay (2022) revealed that England, Portugal and Hong Kong implemented online education while Canada, Malaysia and Zimbabwe abolished the teaching practice requirements to complete the teaching practice with online education due to a lack of internet infrastructure. In a similar study, Moyo (2020) indicated that the challenges facing online education, including online teaching practice supervision, were lack of internet, high cost of mobile devices and broadband, lack of mobile learning management systems, resistance to change by lecturers and lack of WIFI connectivity. It is in this regard, that this study sought to establish the factors that hinder the resilience of student teachers on teaching practice in COVID-19 era in the specific context of Masvingo District of Zimbabwe.

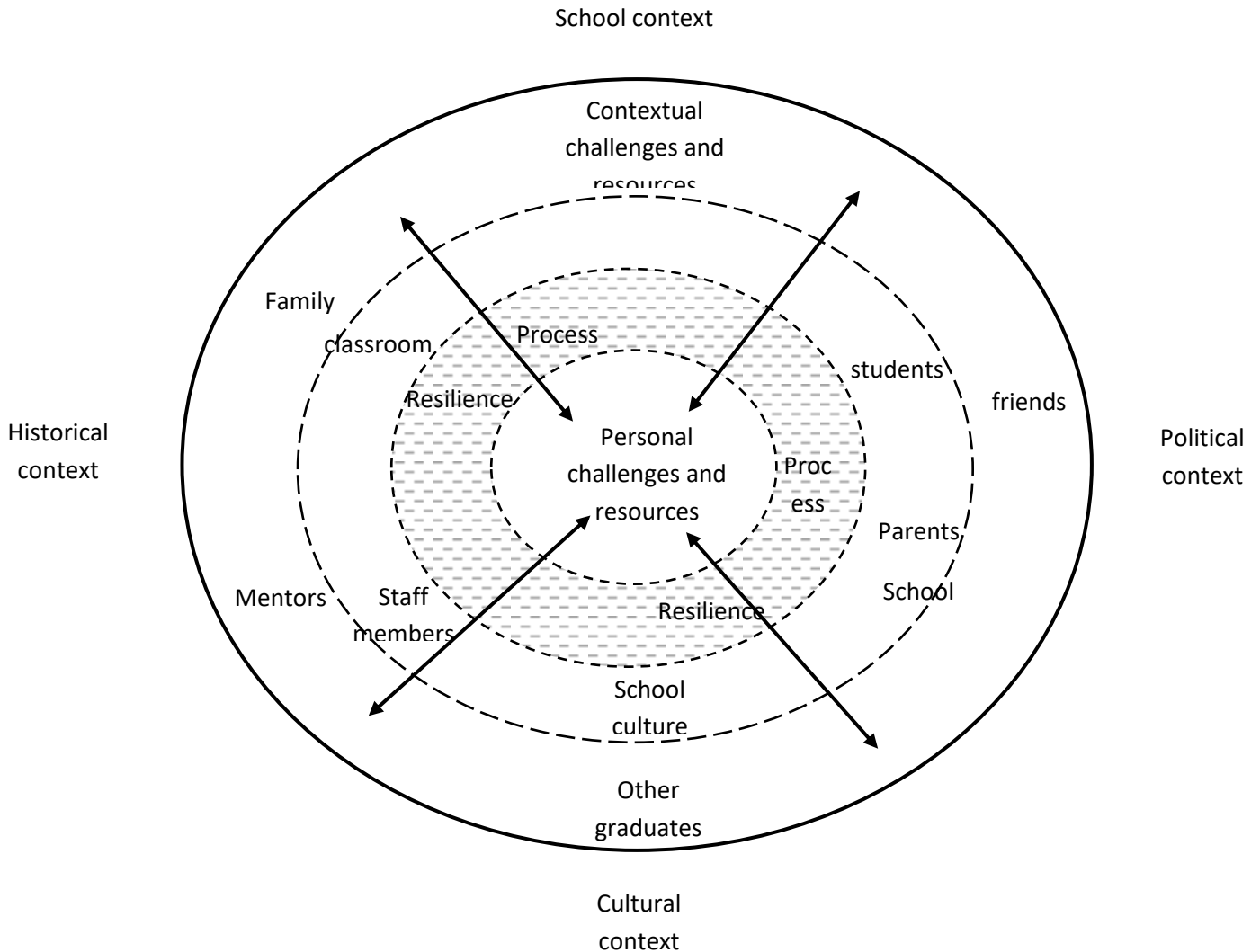
## **2.5 Personal and Contextual Resources that Promote Resilience**

In this section of the study, the researcher deliberated on literature from a broader perspective that explored how personal and contextual resources promote the resilience of student teachers on teaching practice in COVID-19 era. It is important for this study to establish the personal and contextual resources that promote the resilience of student teachers on teaching practice in the COVID-19 era. Research studies focusing specifically on teacher resilience have been conducted in the United Kingdom (e.g., Sammons, Day, Kington, Gu, Stobart, & Smees., 2007); Ireland

(e.g., Morgan, 2011); Australia (e.g., Mansfield, Beltman, Price & Mc Conney, 2012; Johnson., et al 2014), Europe (e.g., Wosnitza., *et al* 2013), and South Africa (e.g., Ebersohn, 2012; 2014). Internationally, there is a shared thinking amongst academics that particular personal resources (e.g., motivation, social and emotional competence) and the use of coping strategies (e.g., problem-solving, goal setting, maintaining work-life balance) enable teachers to demonstrate resilience.

There is a common agreement among researchers that resilience research offers a way to investigate the attitudes and behaviors of student teachers within the context of their work and professional lives and sheds light on how these individuals maintain their commitment, motivation and engagement (Mansfield *et al.*, 2012). In concurrence, Gu and Li, (2013) claimed that resilience offers a useful lens, which allows us to probe teachers' internal and external worlds to explore which factors, individually and in combination, influence their capacity to sustain their passion, enthusiasm and strong sense of fulfillment. Mansfield *et al.* (2014) proposed a model of early career teacher resilience that brings together individual or personal characteristics and the various social and cultural contexts of teaching which can both act as challenges or resources. The model represents resilience as a dynamic process at the interface of the person and the context.

**Figure 2.5.1 A model of early career teacher resilience**



*Adapted from Mansfield, Beltman & Price (2014)*

According to Mansfield, Beltman and Price (2014) the inner circle indicates personal aspects. The personal characteristics could act as a challenge or a resource as they enable an individual to better overcome contextual challenges. The outer circles show multiple contexts that are important for teacher resilience, including family and friends, school colleagues, school administrative staff, and employing bodies. Social and cultural contexts could provide challenges for student teachers or could also be supportive and offer resources that enable them to thrive as professionals. The interface of the person and the context, indicated by the shaded circle, shows the resilience process. The diagram identified personal and contextual challenges and resources and then focused on the resilience process.

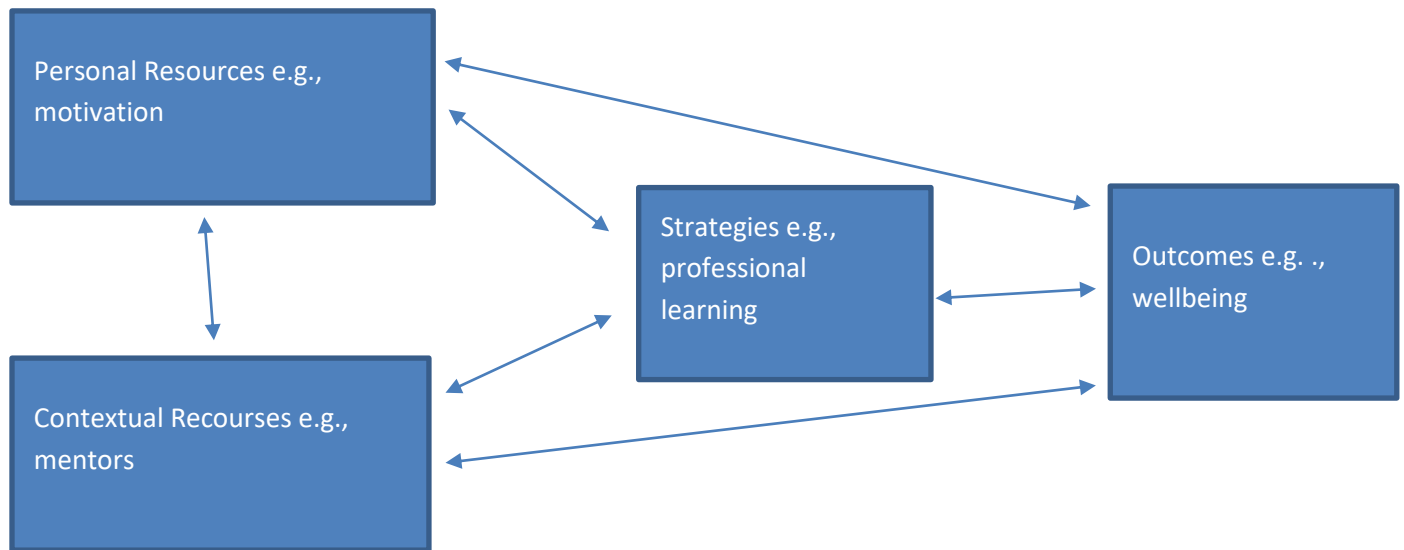
While there are, a number of risk factors that lead to teacher stress, burnout, and attrition, research also points to a number of protective factors that help teachers overcome these risks and meet the challenges of teaching (Poyner, 2016). Greenfield (2016) argues that despite the differences in individuals and the work environment, it is possible to ascertain the presence of certain situated factors that can positively contribute to the commitment and resilience of student teachers. Resilience-related factors are factors that influence resilience including personal factors such as a sense of vocation and purpose, and contextual factors such as problem-solving and help-seeking. Thus, there is a need for this research study to explore the personal and contextual factors that cultivate resilience in student teachers in the COVID-19 era with a particular focus on Masvingo District, Zimbabwe.

## **2.5.2 Views on personal and contextual factors that promote teacher resilience**

### **2.5.2.1 A systematic view of resilience**

In this study, a systems approach to the study of resilience of student teachers on teaching practice in COVID-19 era is vital as student teachers do not operate in a vacuum. A number of systems are internetworked and as a result, they influence the resilience of student teachers on teaching practice in COVID-19 era. Masten (2014) defines resilience as “The capacity of a dynamic system to adapt successfully to disturbances that threaten system function, viability, or development” (Masten, 2014). A system could be an individual, but also a family, a school, a community, an organization and economy or an ecosystem. (Masten, 2014).

**Figure 2.5.2.1 A systemic view of the dynamics and interactive systems that influence teacher resilience**



*Adapted from Mansfield et al., (2016).*

The bi-directional arrows between all components of the system indicate the dynamic, interactive nature of all the parts. There is therefore need for this study to establish how personal resources, contextual resources, strategies and resilient outcomes as dynamic and interactive systems influence the resilience of student teachers on teaching practice in COVID-19 era.

Table 2.5.2 shows the personal and contextual factors that are related to resilience identified by Mansfield *et al.*, (2016).

**Table 2.5.2 Personal and Contextual factors related to resilience**

Personal resources	Contextual resources	Strategies	Outcomes
Motivation	School leaders	Work-life balance	Well-being
Efficacy	Colleagues	Problem-solving	Commitment
Sense of purpose	Relationships with learners	Professional learning	Job satisfaction
Optimism	School culture	Goal setting	Agency
Social competence	Mentors	Setting boundaries	Enthusiasm
Emotional competence	Trust	Reflection	Sense of belonging
Initiative	Recognition	Humour	Responsibility
Sense of vocation	Autonomy	Communication	Passion
Hope	Family support	Help-seeking	Enjoyment
Empathy	Social networks	Faith-practices	engagement
High expectations	Opportunities for participation	Time management	
Value	Emotional support	Persistence	
courage	Collaboration	Emotional regulation	
	Induction programmes	Seeking opportunity for renewal	
		Mindfulness	

*Adapted from Mansfield et al., (2016).*

Table 2.5.2 outlines personal resources, contextual resources, strategies and resilient outcomes related to teacher resilience that were identified by Mansfield, *et al.*, (2016).

### **2.5.3 Personal resources related to resilience**

A perusal of the literature confirms that the factors under personal resources are related to motivation and emotions. Motivation, that is, inner drive or intrinsic motivation is important for resilience (Hong, 2012), other factors associated with motivation are, a sense of purpose, in particular a sense of moral purpose (Day, 2014). Hog (2012) argued that a sense of vocation is essential for teacher resilience and teacher quality. The initiative is also important for teachers in

how they exercise a sense of agency and address challenges (Cameron and Lovett, 2014). A study by Gu and Day, (2007), revealed that efficacy or the importance of self-belief in student teachers can be heightened as the student teachers encounter and overcome perhaps with support, the challenges they face in their teaching. The initiative is also important for teachers in how they exercise a sense of agency and address challenges (Cameron & Lovett, 2014). Personal resources associated with emotions such as academic optimism enable school cultures and resilient principles (Day, 2014). Hope, empathy and social and emotional competence are protective factors that promote resilience in student teachers. Courage or the capacity to move into situations when one feels fear or hesitation promotes the resilience of student teachers (Le-Comu, 2013). Pedagogical Content Knowledge includes knowledge of pedagogy, knowledge of students, knowledge of subject matter, and knowledge of environmental contexts (Zhu and Wang, 2020). Internal resources that mainly promote Pedagogical Content Knowledge include the student teachers' classroom observation and reflection ability, attitude, personal characteristics, personal teaching beliefs and traits (Zhu & Wang, 2020).

A study by Baroudi, *et al.* (2022) showed that the coronavirus pandemic has interrupted school communities all over the world. Students and teachers experienced stress and faced many challenges during this time of uncertainty. Teachers have been forced to alter their instruction methods and curriculum content to distance learning and engage with students virtually (Baroudi, *et al.* 2022). Teachers' beliefs in their ability to effectively handle the new situation play a crucial role in influencing important academic outcomes such as students' achievement and motivation (Barni, *et al.*, 2019). The challenge of doing something new comes generally with minimal confidence; henceforth having to cope with a sudden transition to a new means of teaching-learning is overwhelming in most situations since online teaching and computer-based instruction are considerably different from face-to-face teaching/learning and require specific teacher training and preparation (Dolighan & Owen, 2021). It was also proven that teachers who are more likely to feel engaged with students and who try more creative strategies to teach students have a high level of self-efficacy (Mansfield, *et al.*, 2021). Several studies showed the positive influence of teacher self-efficacy on their beliefs about teaching and job satisfaction (Baroudi, 2020; Jelinska &Paradowski, 2021). Runner & Pratt (2017) argue from the New Zealand context that self-efficacy beliefs play a significant role in teachers' effectiveness and overall satisfaction and comfortability in doing their jobs. Self-efficacy increased job

commitment and satisfaction levels. Thus, there is a need for this study to explore the influence of personal resources on the resilience of student teachers on teaching practice particularly in COVID-19 era in Masvingo District.

#### **2.5.4 Contextual resources related to resilience**

In this research, the researcher attempts to review the literature on contextual resources that promote the resilience of student teachers in COVID-19 era. Relationships both within and outside the working context were identified as important for teacher resilience. Citing Jordan's model of relational resilience, Le Cornu (2013) asserts that strengthening relationships is critical for enhancing resilience, especially in early career teachers. Relational resilience is informed through a web of strong and trusting relationships between teacher-leaders, teachers-teachers, and learners-teachers and emphasizes the importance of mutual empowerment, growth and support at the centre of the resilience process (Day and Gu, 2014; Gu, 2014). Relationships are boosted when school leaders recognize the achievements of teachers and offer support and encouragement to 'stretch and grow' (Cameron and Lovett, 2014). Teacher-teacher relationships were critical in that, trusted colleagues available for daily debriefing boosts morale because you know what you are going through and can help keep your 'spirits up' (Mansfield *et al.*, 2016). Hong (2012) posits that teacher-teacher relationships are important for teacher efficacy, which in turn influences the outcomes of commitment, resilience and retention. Fellow teachers can provide non-judgmental support and a reality check (Papatraianou and Le-Cornu, 2014). In her research in South African Schools, Ebersohn (2012), used the term Relationship Resourced Resilience (RRR) to emphasize that resilience occurs as a collective process whereby individuals 'flock' together to access, mobilize and share resources for positive adaptation in adverse conditions. Relationships are therefore important both for individual and collective resilience. Existing studies have shown that educational internships can promote the development of student teachers' Pedagogical Content Knowledge (Sun, 2017, Li and Qin, 2015, Liu, 2015). Factors that influence the development of Pedagogical Content Knowledge include communication with peers, experienced teachers, teaching experience and reflection, and personal observation (Zhu & Wang, 2020).

Although the literature reports variations in the quality of mentors (Mansfield, Beltman and Price, 2014), believe that positive relationships with mentors have been shown to influence early

career teachers' efficacy, satisfaction, and identity (Hong, 2012). There is a common agreement among researchers that schools that promote resilience and well-being for staff have been characterized by supportive administration and colleagues, collaboration, opportunities for meaningful participation and contribution to the decision-making process (Cameron & Lovett, 2014; Johnson *et al.*, 2014). Researchers also acknowledge that elements of trust, autonomy, collegiality and leadership are vital to resilience-promoting school cultures (Gu, 2014) as well as emotional support which can have a cushioning effect in times of challenge (Keagh, Garvis, & Prendergast, 2012). There is a need for this research study to investigate how contextual factors promote the resilience of student teachers on teaching practice in COVID-19 era in Masvingo District, Zimbabwe.

### **2.5.5 Strategies that promote resilience**

This section of the study endeavors to carefully explicate the strategies that promote the resilience of student teachers on teaching practice in the COVID-19 era. Some of these strategies include home-work life balance, problem-solving, help-seeking, communication, time management, humour and emotional regulation. Collaborative problem-solving as well as help-seeking were noted as important for student teachers (Johnson *et al.*, 2014) which can sometimes be challenging for beginning teachers (Mansfield *et al.*, 2012). Strategies that assist with well-being such as actively taking care of oneself, for example, could recognize their own stress levels and take steps to reduce this through physical activity or social networking. Engaging in ongoing professional learning is an important strategy for enhancing resilience especially if it responds to student teachers' interests, needs, and aspirations and involves reflection (Leroux & Theoret, 2014). Professional learning provided an important avenue for professional rekindling and rejuvenation. Being able to communicate efficiently with parents, colleagues and the school community is an important strategy to promote resilience (Wiezer, 2014). Setting emotional boundaries to prevent stress and burnout was a strategy used by teachers staying in the profession (Hong, 2012) Mansfield *et al.*, (2016) further explained that having clear boundaries enabled teachers to feel secure, take risks and enable autonomy. Strategies that promote positive emotions such as humour, enable student teachers to endure negative emotions and gain a sense of emotional control (Doney, 2012). Similarly, Curry & O'Brien (2012) described humour as part of "creative wellness".

Thieman, Max & Kitchel (2014) identified two theoretical approaches to teacher resilience, these are; the multidimensional approach in which personal and environmental factors merge to compose teacher resilience and the strategic approach in which teacher resilience is a process of adaptation and different strategies are engaged. A coping mechanism is a process of attempting to manage the demands created by stressful events (Bland *et al.*, 2012). Cognitive coping strategies, behavioral coping strategies and social coping strategies are some of the coping mechanisms employed by student teachers amidst stressors (Gutierrez *et al.*, 2016).

### 2.5.6 Resilient outcomes

In a study by Pretsch, Flunger and Schmitt (2012) it was reported that measures of resilience predicted the outcomes of wellbeing and job satisfaction and suggested that resilience as a personal resource buffers the effects of the special occupational challenges of the teaching profession. A study by Cameron and Lovett, (2014) revealed that leadership practices in schools, especially where teachers feel valued, respected, and supported to develop their expertise and experience agency are associated with commitment and job satisfaction. Keogh *et al* (2012) posit that agency, efficacy and resilience work together in that agency assists teachers in managing challenges which in turn enhances self-efficacy and consolidates resilience. Many studies have revealed that factors such as passion, enthusiasm and enjoyment reflect positive emotional states which were also reported as critical to teacher resilience and intentions to remain in the profession (Le Cornu, 2013).

Table 2.5.7 presents individual and contextual protective factors for student teacher resilience promotion.

**Table 2.5.7 Individual and contextual protective factors for student teacher resilience**

Individual protective factors	Contextual protective factors
Altruistic moves	School administrative support
Sense of competence and pride	Mentor relationships
Strong intrinsic motivation	Support from peers and colleagues
Tenacity and perseverance	Working with the learners
Internal locus of control	
Proactive, problem-solving skills	

Individual protective factors	Contextual protective factors
Self-insight and reflection	
Professional aspirations	

*Adapted from Beltman (2011) cited in Mansfield, et al., (2021)*

A study by Mansfield, *et al.*, (2012) established that teachers who possess characteristics of resilience are more likely to persevere in adverse conditions. The teachers find it easier to adapt to change, and are more inclined to the profession. Table 2.5.7 show that teachers develop attributes such as a strong sense of competence, efficacy and accomplishment. Their capacity for purposeful career decision-making is also improved as their level of self-insight grows. This ultimately promotes professional freedom, agency and their ability to cope with various scenarios in the workplace. (Beltman, 2011 cited in Mansfield, *et al.*, 2021). Mansfield, *et al.*, (2012) identified factors that contribute to teacher resilience and sustain them in the face of adversity. The factors include personal strengths such as altruism, strong intrinsic motivation, perseverance, persistence, optimism, willingness to take risks, emotional intelligence and flexibility. A perusal of the literature also confirmed that particular coping skills such as proactive problem-solving and help-seeking skills were associated with teacher resilience (Beltman (2011) cited in Mansfield *et al.*, 2021). From another angle, Pollard *et al.*, (2014) emphasize self-reflection as specifically vital for developing social-cultural awareness, contextual, interpersonal skills, self-understanding, risk-taking and professional efficacy for teachers.

In support of the above arguments, Patterson *et al.*, (2002) cited in Wabule (2019) identified seven key strengths that bolster teacher resilience:

- being positive in spite of adversity;
- staying focused on what you care about;
- flexibility in how you achieve your goals;
- taking charge;
- creating a climate of personal and professional support;
- maintaining high expectations for success for learners, teachers and parents;

- Creating a shared responsibility and participation Patterson *et al.*, (2002) cited in Wabule (2019).

Besides the identified strengths that bolster resilience, there are protective factors such as self-efficacy, home and work-life balance, administrative support and collegiality, social competence and emotional competence that contribute to teacher resilience (Mansfield, 2016).

### **2.5.8 Protective factors that contribute to teacher resilience**

In this study, the researcher attempts to review the protective factors that contribute to teacher resilience. These included self-efficacy, home and work-life balance, administrative support and collegiality, social competence and emotional competence. It is important for this study to specify these protective factors so that the study establishes their influence on the resilience of student teachers on teaching practice in COVID-19 era.

#### **2.5.7.8.1 Self-efficacy**

There is a growing body of literature suggesting that self-efficacy, home-work life balance, administrative support, collegial support, social and emotional competence are protective factors that contribute to student-teacher resilience. In this case, there is a need for this research study to ascertain how these factors contribute to the resilience of student teachers on teaching practice in COVID-19 era. Resilient individuals possess a strong sense of internal beliefs when responding to life events, handling both threatening and nonthreatening circumstances with confidence. (Holzberger, Phillip & Kunter, 2013). Self-efficacy is identified as a protective factor and a prerequisite for teachers' resilience. Gebbie *et al.*, (2012) suggested that self-efficacy in educators is a powerful trait that is often underestimated. Self-efficacy is most influential in a teacher's early career and can be enhanced when; teachers overcome challenges in their teaching (de Jong *et al.*, 2014).

Bandura's theory of self-efficacy is at the core of the self-efficacy theory. According to the Social Cognitive Theory, human behaviour is shaped by interaction between personal that is beliefs, abilities and social/environmental factors (Bandura, 1997 in Baroud, et al 2022). Self-efficacy beliefs are expectations or perceptions that one can successfully perform behaviour. In the school context '... the teachers' belief in his or her capacity to organize and execute the course of action required to successfully accomplish a specific teaching task in a particular

context' (Scarparolo and Subban, 2021). Bandura (1997) in Baroud, *et al.*, (2022) argue that self-efficacy is influenced by four fundamental factors:

- **Mastery experience:** this occurs when a person attempts to do something and succeeds in it. Bandura's (1997) mastery experience expands one's self-efficacy as it allows him/her to successfully do something new because it was similar to what he/she did before. Pre-service teachers received support from their mentor teachers and university supervisors on how to conduct virtual field experiences. This aligns with Bandura (1997) who argues that the provision of training sessions, support and professional development opportunities helps people obtain mastery experience in the self-efficacy theory.
- **Vicarious experience:** it involves observation of other people's successes and failures and learning from them. Pre-service teachers observed their mentor teachers and teach online and their fellow trainee teachers successfully complete virtual field experience. Pre-service teachers learned from the experiences of the people they observed and that helped build their self-efficacy belief. (Bandura, 1997)
- **Verbal Persuasion** impacts individuals' self-efficacy. This involves feedback on one's performance. Bandura (1997) states that when a person receives feedback and persuasion that he/she can complete a task he/she is likely to gain encouragement and do the work successfully. Pre-service teachers received continuous feedback from their mentor teachers and university supervisors about their performance in virtual field experience. The feedback, encouragement and support enabled pre-service teachers to boost their self-efficacy beliefs and to complete their tasks successfully.
- **Emotional and Physiological States:** The state that a person will be in at the beginning of an encounter is a great determinant of the success or failure of an experience (Baroudi, *et al.*, 2022). That means if a person feels anxious, discouraged and does not get the essential support, he/she will likely fail in doing the task. In contrast, if a person feels motivated, enthusiastic to learn and gets support, he/she is likely to succeed at the task.

Student-teacher self-efficacy has been linked to a number of important outcomes including instructional quality, well-being, burnout and commitment to the teaching profession (Scarparolo and Subban, 2021). There is a shared understanding among researchers that early practical experience in schools is posited to have a positive impact on the development of self-efficacy in

student teachers since it affords them with opportunities to experience success known as ‘mastery experience’ (Berg & Smith, 2018; Clark & Newbery, 2019; Pfitzer-Eden, 2016). The COVID-19 pandemic, however, resulted in widespread school closures and subsequently, student teachers across the globe were unable to complete the practicum that typically forms the important part of their training (Kidd & Murray, 2020).

Researchers in the field of resilience typically distinguished between different components of teacher self-efficacy, the most common of which include self-efficacy for instructional strategies, that is, the perceived ability to use a range of strategies to increase and assess student understanding; self-efficacy for classroom management, that is, perceived ability to manage student behaviour, especially disruptive behaviour and self-efficacy for student engagement, that is, perceived ability to motivate and engage students particularly those who lack the interest to learn (Tschannen-Moran & Hoy (2001) in Symes, Lazarides and Hubner, 2023). Studies indicate that self-efficacy for instructional strategies (Lazarides & Schiefele, 2021) and self-efficacy for student engagement (Fackler, ET al.2021) and self-efficacy for classroom management (Dicke, *et al.*, 2014; Lazarides *et al.*, 2020) positively related to indicators of effective teaching in in-service teachers. Data analysis from the 2018 Teaching and Learning International Survey (TALIS) 2018; OECD, 2019) found that teachers reporting higher self-efficacy also reported using higher quality teaching strategies (Holzberger and Prestele, 2021) which in turn led to greater student motivation and learning through their effects on students’ perceptions of teaching quality. The 2018 Teaching and Learning International Survey (TALIS, 2018; OECD, 2019) reported a positive association between the teacher self-efficacy of in-service teachers and a range of personal and environmental factors including working with more experienced teachers with professional collaboration. Opportunities to work with and learn from other teachers have also been linked to the development of teacher self-efficacy in student teachers (Symes, *et al.*, 2023) and practical experiences in schools are key elements of teacher education programs (Clark and Newberry, 2019; Kidd and Murray, 2020). In addition, student teachers may also gain practical experiences in more informal ways as part of their wider training programme, such as working on case studies, receiving feedback from peers or their tutors and group work (Symes, et al. 2023). Symes, *et al.*, (2023) posit that practical experiences appear to have a positive impact on the development of teacher self-efficacy in student teachers.

Henry (2016) discussed the importance of mentorship in developing self-efficacy in beginner teachers. Other similar studies revealed that not only did self-efficacy develop through mentoring but also previous work experiences, mentoring support from colleagues, and professional learning enhanced novice teachers' levels of self-efficacy (Baroud, *et al.*, 2022). Renner & Pratt (2017) argue from the New Zealand context that self-efficacy beliefs play an important role in teachers' effectiveness and overall satisfaction and comfortability in doing their jobs. Pressley & Ha (2021) surveyed 361 in-service teachers either fully online, in a hybrid model or fully face-to-face during the COVID-19 pandemic. The results of their study found that, in general teachers reported lower levels of self-efficacy for instructional strategies and student management than in previous studies.

### **2.5.8.2 Home and work-life balance**

Finding a balance between work and home life is a vital contributor to teacher resilience (Andrew, 2015). Boyd (2013) stated that creating a balance between home and school contributes to physical and emotional well-being away from school, which in turn contributes to increased satisfaction at school even under adverse conditions. Humour can also relieve stress and burnout while at the same time contributes to resilience (Gebbie *et al.*, 2012).

### **2.5.8.3 Administrative support and collegiality**

As part of administrative support, Maief-Hoifer's (2015) study revealed that mentor relationships were particularly helpful in assisting student teachers in navigating challenging situations and problem-solving. Colleagues are an important part of the mentoring process and often play an essential role in creating hope, boosting morale, and helping teachers face challenges (Bullough, *et al.*, 2012). Giovazolias (2015) describe the influences and importance of policies and effective organization as a contributor to student teachers' resilience.

### **2.5.8.4 Social and emotional competence**

Levels of attachment are developed in part based on the social and emotional competence of not only children but also adults (Witaker, Derth-Wesley, & Gooze, 2015). There is a common agreement among researchers that teachers who are socially and emotionally competent are aware of and are able to maintain their full range of emotions (Maier-Hofer, 2015; Mansfield, *et al.*, 2014). Socially such individuals tend to be pro-social and know how to create and maintain relationships with others (Bullock *et al.*, 2015). In line with the above argument Klassen, Perry and Frenzel, (2012) reported that socially and emotionally competent student teachers do not mask emotions, rather they demonstrate healthy strategies when responding to less-than-ideal circumstances. In agreement, Gu and Li (2013) maintained that "the nature and sustainability of resilience in teachers is not inborn but influenced by individual qualities in interaction with contextual influences in which teachers' work and lives are embedded.

Table 2.5.8.5 describes the dimensions and aspects of resilience that are important for teacher resilience.

**Table 2.5.8.5 Dimensions and aspects of resilience**

Dimension	Aspects of resilience examples
Emotional	Not taking things personally, sense of humour, ability to bounce back, emotional regulation
Motivation	Self-belief and confidence, persistence and perseverance, having realistic expectations, being positive and optimistic
Professional-related	Teaching competence and skills, classroom management, facilitating effective learning, being flexible and adaptable
Social	Asking others for assistance, interpersonal skills, ability to take advice from others, professional and personal support networks

*Adapted from Beltman (2021)*

Table 2.5.8.5 identifies emotional, motivation, professional-related and social dimensions that influence resilience in teachers. These dimensions influence personal aspects such as sense of humour, self-belief, teaching competence and interpersonal skills that promote resilience in teachers (Beltman, 2021)

If personal and contextual factors are both important, what are the processes by which they work to sustain teachers? (Beltman, 2021). In this view, resilience lies at the interface of person and context, where individuals use strategies to enable them to overcome challenges and sustain their commitment and sense of well-being (Beltman, 2021).

### **2.5.8.6 Motivational resources to cope with stressors**

The impact of stressors on student teachers' distress depends on the personal, contextual or social resources that are available to cope with such stress (Nunez-Regueiro, 2017; Jamain, *et al.*, 2022). A perusal of the literature revealed that occupational resources that prevent teacher distress include having a strong occupational call by accumulating numerous reasons for choosing the teaching profession (for example, intrinsic, altruistic and extrinsic reasons (Valenzuela, *et al.*, 2019) and relatedly, having a strong motivation to teach by valuing the teaching profession (e.g., in terms of extrinsic, altruistic and extrinsic benefits (Valenzuela, *et al.*, 2019). Occupational resources such as social support from supervisors or student teachers' mentors during teaching practice (e.g., teaching advice, emotional and organisational support (Paquette & Rieg, 2016; Stanulis et al., 2018) and being hopeful about the teaching career by expecting positive outcomes on the job (McIlveen & Perera, 2016).

In this study, process-focused perspectives, context-focused perspectives and system-focused perspective are of much interest as the researcher needs to establish how student teachers' use of personal and contextual factors to deal with teaching practice challenges have a bearing on the development of their resilience on teaching practice in COVID-19 era.

### **2.5.9 Process-Focused Perspectives**

Table 2.5.9.1 shows the responses to challenges by dimension as teachers actively use a variety of strategies to overcome challenges.

**Table 2.5.9.1 Early career teacher responses to challenges by the dimension of resilience**

Emotional	Motivational	Professional-related	Social
Keep calm	Believe in yourself	Focus on the	Debrief with partner
Focus on what you love about the job	Have realistic expectations	learners	Ask for help rather than pretend it is okay
Enjoy the learners		Use problem-solving skills	Talk to your mentor
Manage emotions		Reflect	Talk to other staff
Positive self-talk		Get organised	Seek counselling
Have fun			
Use coping skills			

*Adapted from Beltman (2021).*

Rather than being passively affected by challenges, teachers actively use a variety of strategies to overcome challenges, with the potential to also “change the ability of an at-risk environment to enable resilience” (Ebersohn, 2012). Thus, there is a need for this study to establish how student teachers on teaching practice use a variety of strategies to overcome challenges induced by the COVID-19 pandemic.

### **2.5.10 Context-Focused Perspectives**

There is a shared thinking amongst academics that resilience involves personal agency and the ability to use not only one’s own personal resources but also those in various contexts (Gu and Li, 2013; Ebersohn, 2012). In their research, Michael Ungar and his colleagues explained that resilience involves “both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being and their capacity individually and collectively to negotiate for those resources to be provided in culturally meaningful ways” (Ungar, 2012). A social ecological lens is used to consider the individual person and multiple layers or levels of context. Furthermore, Ungar (2012) highlighted the importance of the “social and physical environment as the locus of resource for personal growth”, also stating that, “individual and ecological positions are neither mutually exclusive nor

antagonistic. They simply, emphasize different aspects of the processes associated with resilience”.

#### **2.5.10.1 Relational resilience by Jordan**

As stated by Jordan (2006) the relational-cultural theory “is a theory about our basic interconnectedness about the inevitability of needing one another throughout our lives” which resonates well with the findings of studies on resilience. Jordan (2006) maintains that growth-fostering connections are characterized by mutuality, empowerment and the development of courage. Jordan (2017) proposed a model of relational resilience that identifies three main building blocks of relational resilience, which are, mutuality, empowerment and development of courage. Mutuality refers to the impact of finding strong mutual reciprocal relationships (Jordan, 2017) and this is at the core of resilience protective factors (Rojas, 2019). Mutuality offers support and also provides opportunities for participation in growth-fostering relationships. A study by Le Cornu (2013) concurs with a study by Johnson, et al., (2012) which revealed that these characteristics of mutuality resonate well with the notion of reciprocity which underpins many of the effective professional relationships in which the early career teachers engaged. Reciprocity was found to be very strong in two sets of relationships, that is, relationships with students and colleagues. These findings were consistent with that of McNally & Blake (2009) who argued that relationships with students and fellow teachers were important for early career teachers.

Furthermore, Jordan (2006) cites empowerment as one of the building blocks of ‘growth-fostering connections’ which enable individuals to experience energy, creativity and flexibility. When the supportive and mutual relationships exist, the individual is empowered. In other words, the person becomes stronger and more self-confident and exhibits the characteristics of a resilient person. Subsequently, the individual may also develop the courage to successfully engage in challenging situations and continue being resilient (Jordan, 2017). In a study by Le Cornu (2013) data showed that in situations where early career teachers were able to establish trusting, respectful and reciprocal relationships, they perceived themselves as more confident and competent, which enabled them to feel competent. Early career teacher relationships with school leaders, peers and themselves were found to be significant. Where school leaders encourage, support and establish the development of relationships based on respect, trust care and integrity,

the early career teachers appeared to flourish. Relationships with peers provide the much-needed emotional support which plays a key role in '*keeping each other going*' through the highs and lows of their teaching experiences. The study by Le Cornu (2013) also revealed that where early career teachers demonstrated a high level of personal awareness, viewed themselves as learners and were reflective, their resilience appeared to be enhanced.

Jordan (2006) identified courage as another feature of 'growth fostering connections' and she defines courage as the capacity to move into situations when we feel fear or hesitation. She notes that as human beings, we are constantly in interactions that are either encouraging or discouraging. A research study by Le Cornu (2013) revealed that more frequently the teachers' friends and family members encouraged them and reaffirmed to them that they were capable and up to the challenge. In the same study, data revealed that early career teachers' relationships with parents of their students appeared to affect their resilience. Challenges included getting to know the parents and families of students, keeping in contact with them, responding to parental expectations, learning to relate to parents with different views, negotiating different family structures and dealing with behaviour and custody issues. Where these went well the early career teachers' self-efficacy seemed to be enhanced, where they did not, the early career teachers questioned their competency.

In one of the studies, Gu (2014) explained that teacher relational resilience is context-specific, role-specific and related to the teachers' sense of commitment, equilibrium and agency. Teacher relational resilience is context-specific as it is related to the level of support the teacher receives from the school managers or leaders and the support and positive feedback received from parents and students. In this regard, supportive relationships with mentors could promote prospective teachers' resilience by encouraging them to thrive during teaching practice. Teacher resilience is role-specific because it is closely associated with a teacher's commitment or sense of vocational calling to the profession (Gu, 2017). The sense of purpose and commitment results from a reappraisal of their role in ways that allow them to be encouraged and strengthened to become resilient in their profession (Clara, 2017; Gu, 2017).

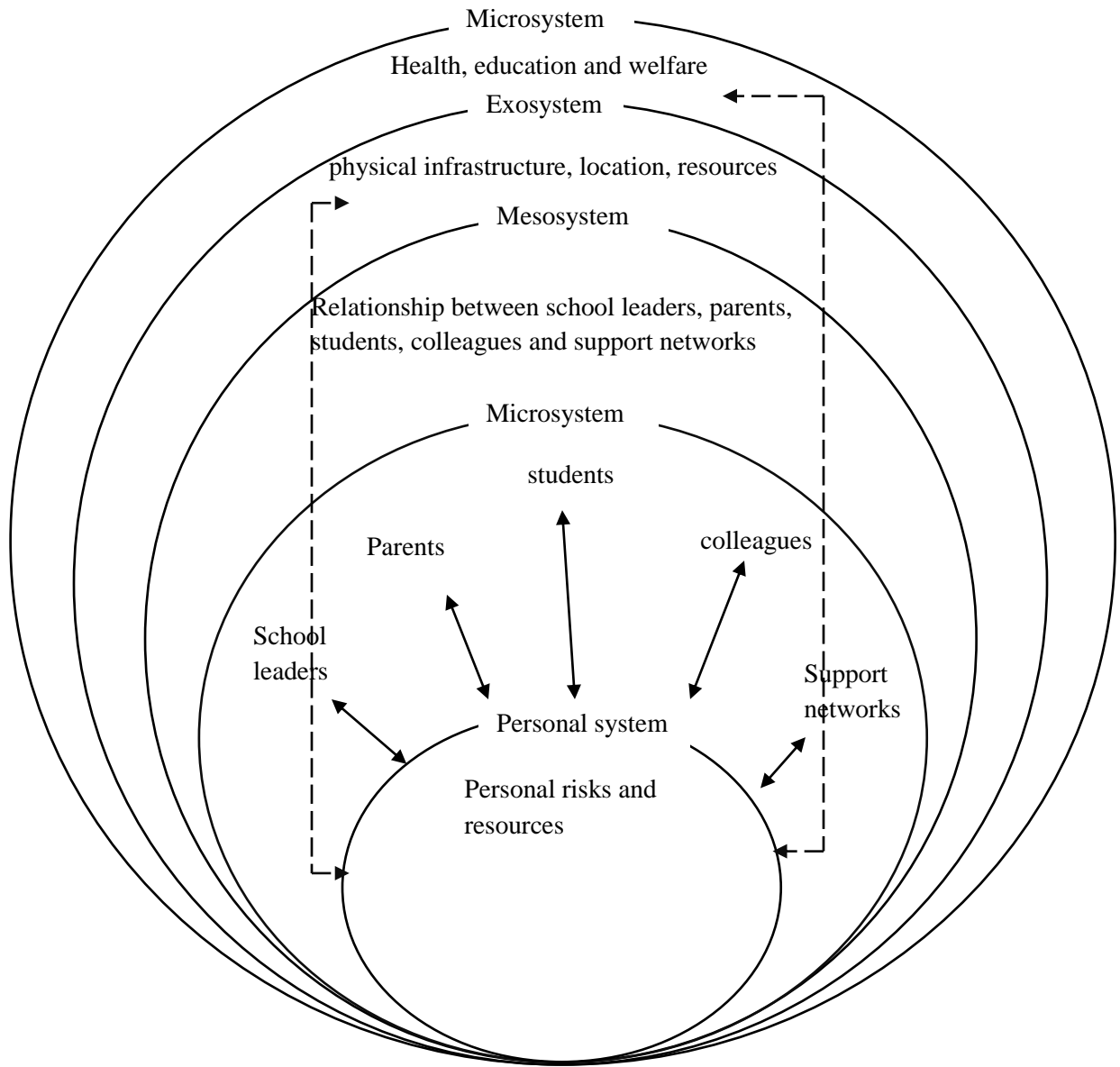
There is a shared thinking among academics that social competence is an important personal resource for the development of relationships, which are developed in the school context through

interactions with colleagues, mentors and school leaders and outside the school with family, friends and social context (Mansfield, *et al.*, 2016) and seemed to promote resilience (Le Cornu., 2013). Therefore, it is important to ascertain in this study how relationships promote the resilience of student teachers on teaching practice in COVID-19 era, specifically in the context of Masvingo District as most studies were done on teachers' resilience and not on student teachers' resilience on teaching practice in COVID-19 era.

#### **2.5.11. System-Focused Perspective of resilience**

The theoretical underpinning of the social-ecology of resilience emerged from Bronfenbrenner's (1979) ground-breaking work on human development throughout the life span (Wosnitza, *et al.*, 2018). The social-ecological systems theory describes how human development is influenced by different types of environmental systems (Attekel & Mahoney, 2017).

**Figure 2.5.11.1 Bronfenbrenner’s Social-Ecological Model (1979, 2005)**



*Adapted from Bronfenbrenner (1979).*

Figure 2.5.11.1 shows a system-focused perspective to understanding teacher resilience based on Bronfenbrenner’s ecological systems theory.

There are four nested types of environmental systems in Bronfenbrenner's ecological systems theory namely, the

- Microsystem
- Mesosystem
- Exo-system
- Macrosystem
- All influenced by the chrono-system (Ettetal & Mahony, 2017).

The microsystem is the teacher's immediate environment involving the school leaders, parents, students, colleagues and support networks. The mesosystem is on how the interaction of different parts of the microsystem works together to support the development of resilience of a teacher. Exo-system is based on the influence of the physical infrastructure, location and resources on the development of resilience. The microsystem deals with the influence of health, education and welfare policies on teacher resilience. The chronosystem deals with the influence of change and constancy due to the passage of time (Ettetal & Mahony, 2017).

Processes that lead to resilience clearly involve many systems within the individual as well as many systems outside the individual (Masten, 2014). These systems are continually interacting with each other, so resilience involves individual characteristics, strategies or processes as well as multiple systems and contexts (Mansfield, *et al.*, 2018).

Teacher resilience is not a personality trait; however, innate characteristics play a part, resilience is something that can be promoted and developed through the provision of support and opportunity for growth so resilience is:

- The capacity of an individual to navigate through challenges and harness personal and contextual resources, as well as,
- the process whereby characteristics of individual teachers and their personal and professional contexts interact over time, to enable
- the outcome of a teacher who experiences professional commitment, growth and well-being (Beltman, 2015).

Applying Bronfenbrenner's theory to research on resilience in children, Ungar and his colleagues argue that "it is children's interactions with multiple reciprocating systems, and the quality of those systems that account for most children's developmental success under negative stress" (Ungar *et al.*, 2013:349). The same argument applies to the research on teacher resilience. As the growing body of literature on teacher resilience shows, the quality of the intellectual, social and organisational conditions in which work and the people with whom they work has significant impacts, positively or negatively, on their capacity to be committed, resilient and effective (Beltman, 2015; Day & Hong, 2016, Johnson, *et al.*, 2016).

The social-ecological model enables us to place teachers in their complex worlds of work and analyses the ways in which their capacity to teach to their best influences is influenced by their professional worlds (Gu, 2014). The focus on the reciprocal interaction between the capacity of the individual and the quality of multiple reciprocating systems offers a more nuanced and powerful conceptual lens to understand why many teachers are able to sustain their commitment, resilience and effectiveness in a place called school (Gu, 2014). In this regard, teacher resilience has been understood as the process where teachers demonstrate the capacity to interact dynamically over time with their context by using protective resources to respond adaptively to risk factors (Mansfield, *et al.*, 2016). Positive outcomes of resilience could include professional commitment, job satisfaction, sustained motivation and engagement. In line with this view, Masten (2014) reiterated that the resilience process involves "many systems within the individual as well as many systems outside the individual and that the adaptive function of the individual is interdependent with many other systems at different levels of function that are continually interacting. Associated with Bronfenbrenner's (1979) theory the concept of the teacher resilience process is believed to involve the dynamic interplay between personal relational, physical (school infrastructure) and broader country-specific health, welfare and education systems to address risks through maximizing resources (Wosnitza, *et al.*, 2018). To understand teacher resilience involves exploring personal risks and resources, microsystem and mesosystem relationships, as well as elements in the exo-system and macro-system and the interaction between these systems over time (Wosnitza, *et al.*, 2018). It is in this regard, that this study sought to establish how the interaction among various systems over time influences the resilience of student teachers on teaching practice in COVID-19 era.

Previous studies looked on teacher resilience through the lens of Bronfenbrenner's (1979) social-ecology theory hence the need for this study to look on resilience of student teachers on teaching practice in COVID-19 era through the lens of the resilience theory.

While research has identified many personal and contextual resources that are important for teacher resilience and recommendations have been made at the individual, school and system levels (Day & Gu, 2014; Johnson., *et al.*, 2014), fewer studies point to specific ways teacher education may make a positive contribution to the development of teacher resilience (Mansfield., *et al.*, 2016) however studies at the pre-service level are limited especially with regards to resilience of student teachers on teaching practice in COVID-19 era. In this case, there is a need for this study to fill up the literature gap glaringly exposed by reviewed studies.

## **2.6 Support student teachers receive on teaching practice in COVID-19 era**

In this study, establishing the kind of support rendered to student teachers on teaching practice is of much interest as it has a bearing on the promotion of resilience in student teachers' resilience on teaching practice in the COVID-19 era. Several studies have revealed that the high attrition levels in the teaching profession have generated a bigger interest in understanding the factors that could promote teachers' resilience (Hong, 2012, Mansfield, Beltman & Weatherby-Fell, 2016). The concept of resilience represents a contemporary paradigm that promotes the development of various protective factors that can promote the mental health of the human being and a positive influence to reduce negative and increase positive outcomes of mental health and performance in the teaching profession (Tellegen, 2012; Truebridge, 2016).

In their study, Saefudin & Yusoff (2021) identified four types of support that student teachers may receive to promote their resilience, namely, emotional support (trust, caring, empathy, love, acceptance, being emotionally present when a person needs a friend) instrumental support, that is, helping behaviour (loaning money, providing material needs, helping in a difficult situation, spending time together) informational support, that is providing knowledge or advise to someone (giving insights on how to solve a problem, providing information, advises) and appraisal support, that is evaluative feedback and rewards (giving verbal affirmation, praises, constructive critique, giving feedback regarding progress). In one of the studies McIlveen & Perera (2016) found out that receiving instrumental support (for example, some money) and emotional support

(for example, in terms of expression affection, encouragement, attention) from parents and siblings contributed to diminished feelings of anxiety among Bahraini student teachers. In the same vein, Kim & Corcoran (2017) posit that social support received from college lecturers and peers in the teacher education programme is conceived as an important component of student-teacher engagement and job satisfaction. In support of the above view Shukla & Shi (2021) opined that social support plays an important psychological wellbeing since it may act as a mediator of life stress.

### **2.6.1 Support from school administrators**

In this study, the role of the school administrators is crucial in helping student teachers on teaching practice in the Covid-29 era manage their stress and become more resilient. Administrators can support resilience in their teachers by articulating high professional expectations for them. Supportive administrators are approachable and also find time with their subordinates, however briefly to connect with them and listen to their concerns (Benjamin & Black, 2012). There is a need for quality observations with constructive feedback and good working relationships with the administrators. Active and receptive school administrators help develop personal relations with their new staff, assign them an appropriate set of courses and arrange for them to receive constructive feedback about their teaching. School administrators use a variety of methods they find effective when assisting beginning teachers including;

- visiting the classrooms
- providing feedback
- providing mentors
- formative and summative evaluation
- an open-door policy
- instructing novice teachers in reflective teaching methods
- providing instruction in the school's classroom management programme before school started
- providing opportunities for novice teachers to observe veteran teachers (Brock & Grady, (1997) cited in Benjamin & Black, 2012)

### **2.6.2 Support from mentors**

The supportive relationships that emerge from the student teaching practice and the student teachers' vocation seemed to provide encouragement to the student teachers to continue in the field (Arcley-Rojas, 2019). Supportive relationships and mutuality are the foremost factors of resilience building (Gu, 2014; Jordan, 2017) relationships with cooperating teachers, college supervisors and learners constituted a significant factor in the student teachers' process of developing their resilience. The positive feedback the student teachers received helped them through their teaching practice and invigorated them to face the challenges of teaching with confidence in themselves (Arcley-Rojas, 2019). As described by other studies, feedback is crucial and valuable for student teachers because it contributes to increasing their level of confidence and self-efficacy, which at the same time are part of the characteristics of the resilient person (Costa & Onofre, 2015). Mentors who are positive role models, creative, up-to-date in terms of teaching methods, caring, and supportive, not only to student teachers but also to the learners, help the student teachers to increase their confidence and empowerment (Arcley-Rojas, 2019). This created an atmosphere of learning and mutual support that fortified the student teachers' resilience.

In a study of mentoring by Hudson & Hudson (2016), it was established that mentors play an essential supportive role, especially in terms of goal setting, enabling the development of reflective practices, modeling effective teaching strategies, giving feedback and guiding mentees. Izadinia's (2015) studies on mentoring established that mentors provided technical support and feedback to student teachers as a way of helping them develop their teaching styles. Providing support to student teachers on teaching practice was found to develop confidence in them to take risks and experiment with new approaches in the classroom. Izadinia (2015) identified two types of support mentors provide to student teachers during teaching practice, namely instructional-related and psychological support. Instructional support relates to knowledge, strategies and skills mentors develop in student teachers and psychological support has to do with enhancing self-esteem, confidence and feelings of effectiveness. In terms of instructional support, it was established that mentors assist student teachers in designing their schemes of work and developing effective lesson plans while on the other hand, psychological support facilitates the ease of fitting into and realistic exposure to school life.

In a qualitative study by Liu (2014) on excellent mentor teachers' skills in mentoring student teachers, it was found that several terms are being used to replace the role of mentors. The terms used are guide, advisor, councilor, instructor, sharer, supporter and encourager. The same study also unpacked other mentor roles such as the provision of pedagogical guidance, emotional support and professional socialization and role models. In another qualitative study, that explores the roles and responsibilities of mentors during teaching practice Mudzielwana (2014) found that mentors assisted mentees in numerous areas such as teaching and learning, assessment of learners' work and classroom management. In the same study, it was found that mentors helped their mentees in developing teaching skills, and professional conduct and providing them with information about the culture of the school and community. Other mentor roles established in the same study included guiding student teachers in the effective use of time, developing lesson plans and effective lesson delivery through modeling and exchanging notes on professional experiences.

In her study on mentoring, Hudson & Hudson (2016) found that mentors provided support to student teachers in the form of feedback, constructing enabling learning environments and showing mentees how to teach effectively and in the process enhancing the quick development of their skills. Hudson & Hudson (2016) also established that modeling essential teaching skills by the mentor is important in the development of student teachers' teaching competencies.

### **2.6.3 Collegial support**

Collegial support is very important to teachers and colleagues should be very helpful with information and materials. A research study by Reeves, *et al.*, (2017) found that teachers' job satisfaction was predicted by the availability of resources and collegial relationships. A study by Arcelay-Rojas (2019) explored the experiences of 10 Puerto Rican middle and high school pre-service at the end of their teaching practice experience. The purpose of this qualitative study was to explore the experiences of secondary-level pre-service teachers and their resilience during their student teaching experience at a university in Puerto Rico. The study reinforced the idea of the importance of promoting supportive relationships with mentors and student teachers. There is a need for this study to investigate the kind of support given to student teachers on teaching practice in the COVID-19 era which is the under-researched field as gathered from various

research studies. This therefore, calls for contributions towards closing the glaring gap in the literature.

#### **2.6.4 Developing resilience in teacher education**

In this study, it is crucial to establish how teacher education programs can nurture and develop resilience in student teachers prior to teaching practice considering that student teachers face a lot of challenges while on teaching practice, for example, the outbreak of COVID-19. Resilience is not something innate, but rather, something that can be developed (Howard and Johnson, 2014; Johnson, *et al.*, 2014). Many studies point out that teacher education programs have an important role to play in preparing teachers for the challenges they face, for example by nurturing and developing their skills in collaboration, problem-solving, managing stress and self-efficacy (Silva, *et al.*, 2018; Durksen, *et al.*, 2017; Mansfield, *et al.*, 2014). Researchers have argued that teachers' capacity to deal with challenges related to the teaching profession requires resilience which is particularly important for student teachers (Gu & Day, 2013; Johnson, *et al.*, 2014). According to Gu & Day (2013:22) 'To teach, and to teach at one's best over time, has always required resilience'. Despite the recognition of the important role of resilience, there is less literature detecting how teacher education programs can develop resilience in student teachers prior to teaching practice (Hazel, 2018; Mansfield *et al.*, 2016). Recent research studies by Beltman *et al.*, (2018); Peixoto *et al.*, (2018) provide emergent evidence that resilience-related skills and strategies can be enhanced during pre-service teacher education.

A perusal of the literature shows that teacher education programs in the United States of America focus on preparing student teachers for classroom-based instructional practice mainly focusing on course work on child development, content and methods/ field courses covering assessment, planning, instructional and student engagement strategies (Council for the Accreditation of Educator Preparation, 2019). What is missing from the United States of America teacher education programs is work pertaining to the social, emotional and motivational needs of teachers once they enter the field (Sikma, 2021). Furthermore, a perusal of the literature revealed that in Zimbabwe, the Diploma in Education Primary is a three-year pre-service programme offered by the University of Zimbabwe, Department of Teacher Education, and is available in all the accredited associate institutions (University of Zimbabwe, 2015). To pass this competitive, internationally recognized Diploma in Education programme candidates should satisfy

examiners in the broad areas of teacher education competence, these are, Theory of Education (Psychological, Sociological, and Philosophical foundations of education as well as Inclusive Education); Professional Studies (general classroom practice, class management, subject content and methodology, scheming, planning, measurement and evaluation, Information and Communication Technology, National and Strategic Studies, Health and Life Skills), Main Subject (Enrichment subject) and Teaching Practice (University of Zimbabwe, 2015).

Recently studies on resilience revealed that resilience has been acknowledged as a critical non-cognitive characteristic of student teachers (Klassen, *et al.*, 2018) and in countries such as Australia, teacher education providers are now charged with the duty to prepare ‘classroom-ready teachers’ (Teacher Education Ministerial Advisory Group, 2015). The vital non-cognitive capacity for selecting applicants for teacher education includes motivation, strong interpersonal and communication skills and resilience (Australian Institute of Teaching and School Leadership [AITSL], 2015). Several scholars believe that resilience can help with feelings of stress and burnout (Richards, *et al.*, 2016), help student teachers sustain commitment and job satisfaction (Mansfield, *et al.*, 2016), as well as developing resilience in student teachers may lead to better teacher retention (Doney, 2013; Gu and Day, 2013). Therefore, it is important to ascertain in this study how teacher education programs in Zimbabwe can nurture and develop resilience in student teachers prior to teaching practice in the wake of COVID-19 pandemic or future pandemics.

## **2.7 Theoretical Framework**

### **2.7.1 The importance of a theoretical framework**

This study utilized the resilience theory as a lens to look into the resilience of student teachers on teaching practice in the COVID-19 era. According to Grant and Osanloo (2015), a theoretical framework is derived from existing theory or theories in the literature that have previously been tested and confirmed by others and is considered a generally accepted theory. A theoretical framework determines which questions are to be answered by research and how empirical procedures are to be used as tools to answer these questions (De Vos, Strydom, Fouche & Delpont, 2012). Thus, in this study the theoretical framework serves as the structure and support basis for the rationale of the study, the statement of the problem, the significance of the study

and the research questions. Without a theoretical framework, the structure and vision of a study are blurred; this can be equated to a house without a plan (Grant & Osanloo, 2015).

### **2.7.2 The Resilience Theory**

Resilience theory has its roots in the study of adversity and how adverse life experiences impact harmfully on people (Van Breda, 2018). Resilience research pioneers, such as Norman Garmezy, Lois Murphy, Michael Rutter, and Emmy Werner, sought to inform practice by understanding the processes that explained how some individuals fared well in the face of adversity while others floundered (Masten, 2013). Examples of key researchers whose work in resilience began with work on vulnerability include Emmy Werner, who conducted longitudinal research over several decades on children born into adverse social conditions in Kauai, Hawaii (Werner and Smith, 1982); Michael Rutter, who studied intergenerational transmission of poverty and disadvantage (Rutter and Madge, 1976); and Norman Garmezy, who studied the contribution of a range of genetic and environmental risks to the development of schizophrenia (Garmezy, 1971).

### **2.7.3 Historical development of the resilience theory.**

#### **2.7.3.1 Landmark studies in the field of resilience**

Research on resilience did not emerge from academics grounding in theory but through the phenomenological identification of characteristics of survivors, mainly young people living in high-risk situations (Glenn, 2020). The foundational study cited in most of the resilience literature was carried out by Emmy Werner (1982) and her colleague Smith (Werner and Smith, 1992), who reported the longitudinal findings of a community after studying 698 infants born in 1955 on the island of Kauai for 30 years. Werner began the study in 1955, studying a multiracial population of children regarded to be at high risk due to environmental factors. The environmental factors identified were perinatal stress, poverty, daily instability and serious parental mental health. The study found that 72 of the 200 children were doing very well despite risk factors. Werner established the resilient qualities that helped these young children to be competent in the face of high-risk environments. The personal characteristics included being female, tolerant, adaptable, robust, socially responsible, achievement-oriented, a good communicator and having good self-esteem. The study also revealed that the caregiving environment both inside and outside the family helped young people thrive in the face of adversity.

Emmy Werner held an ecological view of resilience, focusing on protective factors that promote resilience at the individual, family and community levels (Werner, 1989). These protective factors included dispositional attributes of the individual (sociability, activity level), affectional ties within the family that provide emotional support, and external support systems (church, work). Werner noted that the more stress one experiences, the more protective processes are needed. She suggests that interventions need to address the balance of risk and protective factors at different stages in an individual's life and ensure there are more protective factors or a decrease in stressful life events (Werner, 1989 cited in Vic Health, 2015).

Dr Norman Garmezy was a clinical psychologist and is often noted as being the founder of research in resilience (Vic Health, 2015). Garmezy began his research with a focus on schizophrenia and mental illness and shifted to research on stress resistance, competence, and resilience. Garmezy (1991) conducted the Minnesota Risk Research Project which investigated intentional and informational-processing dysfunction in children of schizophrenic parents from 1971 to 1982. The research found that most children did not become maladaptive adults but

grew up to be warm and competent people. Garmezy notes resilient characteristics which included effectiveness (work, play, and love), high expectancies, positive outlook, self-esteem, internal locus of control, self-discipline, good problem-solving skills, critical thinking skills and humour. Dr Norman Garmezy defined resilience as “not necessarily impervious to stress. Rather, resilience is designed to reflect the capacity for recovery and maintained adaptive behaviour that may follow initial retreat or incapacity upon initiating a stressful event” (Garmezy, 1991). To be resilient, Garmezy states that one needs to show “functional adequacy”, that is, the maintenance of competent functioning despite an interfering emotionality as a benchmark of resilient behaviour under stress (Garmezy, 1991).

Garmezy held an ecological view of resilience, based on this view, he contended that protective factors at the individual and familial levels, and external to the family, all influence resilience (Vic Health, 2015). Some of these factors include individual factors, familial factors and support factors. Individual factors include dispositional attributes such as temperament (activity level), how one meets new situations (positive responsiveness to others), and cognitive skills. Familial factors include family cohesiveness and warmth (despite poverty or marital discord), and the presence of a caring adult in the absence of responsive parents. Support factors external to the family included the availability and use of external support systems such as a strong mental substitute, a supportive and concerned teacher, or an institutional structure that fosters ties to the larger community (church, social worker). Garmezy’s triad of resilience included the personality disposition, a supportive family and an external support system (Glenn, 2020).

Through his research, Garmezy developed three models that explain resilience, these are, the Compensatory Model, the Protective versus Vulnerability Model (Immunity vs. vulnerability) and the Challenge Model (Vic Health, 2015). The Compensatory Model, the Challenge Model and the Protective Factor of Immunity versus Vulnerability Model describe mechanisms for the impact of stress on quality adaptation (Lendesma, 2014). The Compensatory Model sees resilience as a factor that neutralizes exposure to risk while the Challenge Model suggests that a weak risk factor enhances a person’s adaptation. In the Protective Factor Model, the interaction between protection and risk factors reduces the probability of a negative outcome and moderates the effects of exposure to risk. Protective factors foster positive outcomes and healthy personality characteristics despite unfavorable life circumstances (Ungar, 2011). The Compensatory Model

is an additive model, where stressors lower competence and personal attributes improve adjustment. Stress factors and attributes combine in predicting competence. The Protective versus Vulnerability Model (Immunity vs. vulnerability) is an interactive relationship between stressors and personal attributes. The association of stress with the outcome varies depending on the level of the attribute under consideration. The Challenge Model is a curvilinear relationship, where stressors enhance adjustment but not at very low or very high levels. Very high levels of stress lower competence. The basis of the challenge model is that some stress is helpful as it can develop coping skills and encourage the mobilization of internal and external resources (Vic Health, 2015)

Michael Rutter established several principles for resilience theory based on his extensive research (Rutter, 2006, Rutter, 2007; Rutter, 2012; Rutter, 2013). One of the principles Rutter adheres to is that resilience is not related to individual psychological traits or superior function, but rather it is an ordinary adaptation given the right resources. Rutter asserts that individual differences (e.g., genetics, personality, temperament) create differences in how each person responds to risk and protective factors. He states that there is a requirement to assess individual needs in relation to particular circumstances, rather than assume that all risk and protective factors have similar effects in all conditions in all people (Rutter, 2013). He argues that the utility of protective factors and the impact of risk factors are dependent on the context and the individual's situation. Rutter's comments indicate that the universal lists of risk and protective factors provide a general guideline but they do not take into account context and individual differences. Exposure to low-level risk, rather than avoidance, can lead to better resistance and coping skills. However, it is important to note that these experiences should be controllable experiences of stress, as it is uncontrollable experiences that lead to adverse outcomes (Rutter, 2013). One of the key points in each of Rutter's papers is the protective factor of mental features (planning, self-control, self-reflection, sense of agency, self-confidence, and determination). Rutter suggests that individuals who possess these mental features have both control and success at changing events. He suggests that positive coping may mediate the effect of risk and lead to outcomes that are more positive; therefore, it would be beneficial to teach mental features through experiential teaching. A second protective factor emphasized by Rutter is the importance of social relationships. Rutter indicates factors such as maternal warmth, sibling warmth and a positive atmosphere in the family as protective against emotional and behavioral disturbances.

Ann Masten was a student of Norman Garmezy and consequently holds very similar perspectives. Masten indicates there must be two criteria present to be considered resilient, namely a measure of positive adaptation or development and the past or current presence of conditions that threaten to disrupt positive adaptation (Masten, *et al.*, 2009). Fundamental human adaptation systems include attachment relationships and parenting, pleasure-in-mastery motivational systems, self-regulatory systems for emotion, arousal and behaviour, families, formal education systems, cultural belief systems, religion and spirituality (Masten, *et al.*, 2009). Masten notes that most risks are cumulative as they tend to occur together and greater exposure to risk is associated with more negative outcomes and a greater number of symptoms (Masten, 2014). In one of the studies, Gu (2014) explained that teacher relational resilience is context-specific, role-specific and related to the teachers' sense of commitment, equilibrium and agency. It is context-specific as it is related to the level of support the teacher receives from the school managers or leaders and the support and positive feedback received from parents and students. In this regard, supportive relationships with mentors could promote prospective teachers' resilience by encouraging them to thrive during the student teaching experience. Teacher resilience is role-specific because it is closely associated with a teacher's commitment or sense of vocational calling to the profession (Gu, 2017). The sense of purpose and commitment results from a reappraisal of their role in ways that allow them to be encouraged and strengthened to become resilient in their profession (Clara, 2017; Gu, 2017). Interventions should be reducing or eliminating exposure to conditions that have the potential to threaten function or development (maternal depression, prevent homelessness) and they should target assets or resources ... to increase potential promotive compensatory factors (e.g. food, medical care, homes, income, schools, tutors, recreation centres, neighbourhood safety, effective teachers (Masten, 2011). Some risks may have a greater impact at different stages of development so it would be effective to target risks at critical times. Masten discusses the need to have positive objectives and promote competence, as competence begets competence (Masten, 2011 in Vic Health, 2015).

Michael Ungar emphasizes the importance of the environment and proposed a social-ecological understanding of resilience (Ungar, 2013). He states that most research indicates that resilience is a function of the environment's capacity to facilitate growth, rather than a result of individual differences. Ungar proposes that if meaningful resources are available within the environment (e.g., social cohesion, equitable communities), individuals are more likely to engage with them

and show resilience. He asserts that the personal characteristics of personal motivation, sense of agency, temperament, personality variables and genetic predispositions toward particular behaviors (anxiety, impulsivity) are triggered or suppressed by the environment (Ungar, 2013). Given the importance of the social ecology in liberating or constraining growth, Ungar asserts that it is important to understand the contextual, individual and cultural processes of each setting (Ungar, 2013).

### **2.7.3.2 Waves of Resilience Inquiry**

The foundational studies summarized above illustrated behavioral outcomes and suggested the existence of the concept of resilience. The first wave of inquiry focused on identifying protective factors commonly referred to as traits or characteristics of individuals predictive of both personal and social success (Bolton., *et al.*, 2017). The first wave was based on phenomenological descriptions of resilient qualities of individuals and support systems that predict social and personal success (Glen, 2017) so protective factors that serve as buffers to adversity were identified such as self-efficacy, self-mastery, proactive approach to problem-solving, hardness, humour and repressive coping (Bolton., *et al.*, 2017). After the identification of protective factors, the second wave of resilience inquiry focused on the resilience process. Researchers focused on examining the function of acquiring protection, identifying the disruptive and re-integrative mechanisms and the process by which an individual moved from disruption to reintegration. The researchers began to conceptualize resilience as a process of coping with stress, adversity or change in a manner that results in the identification, fortification and enrichment of protective factors (Glen., 2017). Rutter (1987) and other resilience researchers have been consistent in defining resilience as returning to baseline after experiencing adversity. The third wave of resilience enquiry built on empirical data gathered during the first and second waves and focused on expanding the notion that resilience is a mechanism that assists individuals in redirecting or maintaining their developmental trajectory of positive adaptation. Researchers embarked on developing and testing intervention and prevention tools aimed at promoting or engaging protective processes within individuals as well as utilisation of external resources to promote resilience (Bolton., *et al.*, 2017).

### **2.7.3.3 Key elements of the resilience theory.**

Landmark researchers, such as Norman Garmezy, Lois Murphy, Michael Rutter, and Emmy Werner, agree that resilience contains two core ideas, that, a person has experienced serious risk and has demonstrated positive functioning in some way and that resilience is not a special quality that some people are born with (Vic Health, 2015). Their ideas and research propagated the field of resilience science by shifting the emphasis away from deficit-focused orientations toward models centred on positive aims, promotive factors and adaptive capacities (Masten, 2014). The overarching goal of resilience-informed practice is to foster positive adaptation and development in the context of high risk or adversity (Yates, Tyrell & Masten, 2014). The resilience theory, thus, provides opportunities for this research study to explore risk factors and resilience promotive factors of student teachers on teaching practice in the COVID-19 era. Resilience theory aims to emphasize the positive rather than the maladaptive (Rutter, 2012). The resilience theory consists of three central constructs:

- risk factors
- protective factors
- Vulnerability factors (Bolton *et al.*, 2017).

These three central factors are conceptualized as temporarily related interactive complements of a larger multifaceted process of resilience. Risk factors refer to events of adversity or conditions of vulnerability (Smith-Osborne, 2007 cited in Bolton, *et al.*, 2017). There is agreement between the resilience researchers that cumulative risks are worse than individual risks (Vic Health, 2015). Rutter (1987) found out that there was a greater chance of experiencing a psychiatric disorder with an increased number of risks. Garmezy (1991) validated this finding and stated that risk factors appear to have a cumulative effect, reducing qualities of engagement and enhancing disruptiveness. Rutter and Luther alluded to the fact that risk experiences must be controllable rather than uncontrollable stress experiences for good outcomes to occur (Vic Health, 2015). These early studies of risk established that vulnerability contributes to later negative outcomes. Outcomes were normally focused on mental health, as many of the researchers were psychologists or psychiatrists but Werner's outcomes were wide-ranging, including physical, social and intellectual development (Van Breda, 2018). Resilience is promoted or thwarted by direct effects of risks or resources, as well as by moderating processes of protection, vulnerability and differential susceptibility (Yates, *et al.*, 2014). The construct of

risk factors informs research question one and two which dwell much on risks induced by COVID-19 and the personal and contextual risk factors which hinder the resilience of student teachers on teaching practice in COVID-19 era.

Protective factors generally refer to personality characteristics and environmental resources that aid in preventing maladjustment, whereas vulnerability factors refer to personality characteristics or environmental that lead to greater maladjustment among individuals when faced with adversity (Smith-Osborne, 2007 cited in Bolton, *et al.*, 2017). All the early resilience researchers conceptualize protective factors at three levels: the individual, the family and the community. Some of the protective factors identified include among others: mental features, parent-child relationship, social relationships, (Rutter); family cohesion and stability, intelligence (Garmezy); maternal warmth, less separation from parents (Werner); secure attachment, normal cognitive development, effective schools (Masten); locus of control, expressiveness (Luther); and self-efficacy, having a positive mentor and role models, culture/ spiritual identification (Ungar). These landmark researchers emphasize the importance of high-quality relationships (Vic Health, 2015). The idea of protective factors informs research question number three which has something to do with personal and contextual resources that promote resilience of student teachers on teaching practice in the COVID-19 era.

Early researchers noticed that while some people have negative outcomes in response vulnerability, not all do as some dip and recover, others show little or no deterioration in function, and still others appear to achieve higher levels of adaptation (Masten, 2015). Having recognized these differences in outcomes in the face of adversity researchers agree that there are processes that mediate adversity and outcomes. Resilience research involves three connected components which are adversity, outcomes and mediating factors (Van Breda, 2018). This way of thinking leads to process definitions of resilience including “The capacity to rebound from adversity strengthened and more resourceful (Walsh, 2006); ‘The potential or manifested capacity of a dynamic system to adapt successfully to disturbances that threaten the function, survival, or development of the system’ (Masten, 2015); and “The process of adjusting well to significant adversity” (Theron, 2016). Conceptually, therefore, resilience is a process that leads to an outcome and the central focus of resilience research is on the mediating processes (Van Breda, 2018). The resilience theory enables this research study to explore the adversity,

outcomes and mediating factors that influence the resilience of student teachers on teaching practice in the COVID-19 era.

Resilience or the ability to bounce back when faced with adversity is a complex dynamic process that varies across spatial, cultural and temporal contexts (Theron, 2013). Ungar (2012) asserts that resilience cannot be separated from cultural meanings as it is embedded in the cultural understanding of the term. Easterbrooks, *et al.*, (2013) describe resilience as being neither a personal attribute nor something present in a person's environment. Resilience is dynamic; it emerges from many interactions within and between systems in a given cultural, developmental, and historical context that collectively influence the capacity of an individual system to adapt successfully to change (Masten, 2015). Thus, resilience comes from interactions between people and their environment as part of a dynamic developmental system. Resilience theory highlights the protective mechanisms and coping skills that are key components of resilience. Protective mechanisms are factors, which are associated with adaptive functioning in the face of adversity (Graber, Pichon & Carabine, 2015). Protective mechanisms such as parental support, secure attachment, mentoring relationships, supportive friends, academic resilience, and socioeconomic status promote resilience in the face of adversity (Graber, Pichon & Carabine, 2015). Protective mechanisms inform research question four which have something to do with the support student teachers receive on teaching practice during COVID-19. The resilience theory remains an inspiring and informative theoretical framework for implementing positive psychology in teacher education programs. Thus, the current study derives its impetus from the resilience theory as it seeks to explore the student teachers' resilience on teaching practice in the COVID-19 era.

## **2.8 SUMMARY**

In the foregoing chapter, the focus was on a scholastic review of literature related to student teachers' resilience on teaching practice in COVID-19 era. Factors reviewed included the teaching practice stressors induced by the COVID-19 pandemic, the concept of teacher resilience, factors hindering the resilience of student teachers on teaching practice in COVID-19 era, personal and contextual resources that promote resilience, and the support received by student teachers on teaching practice in COVID-19 era. In this chapter, the researcher reviewed the resilience theory which underpins the theoretical framework of this study. The subsequent chapter describes the research methodology adopted for this study.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter highlights the research methodology. A qualitative research approach was adopted to explore student teachers' resilience on teaching practice in the COVID-19 era. The chapter focuses on the research paradigm, the research design, strategies of data collection, analysis and interpretation in qualitative research strategy, the population, sampling procedures and sample size. This chapter also discusses ethical issues and trustworthiness. The study is guided by the main research question and sub-questions presented in this chapter.

#### 3.2 Setting of the study

Zimbabwe has ten provinces; however, this study was carried out in Masvingo Province. Masvingo Province has seven districts. Out of the seven districts Morgenster Teachers' College deploys student teachers for teaching practice in three districts, namely Bikita, Masvingo and Zaka districts. Masvingo District was chosen since Morgenster Teachers' College is situated in Masvingo District. Morgenster Teachers' College is located five kilometres south of Great Zimbabwe. Morgenster Teachers' College operates under the University of Zimbabwe Scheme of Association so the teacher education programme follows a 3.3.3 model (Chivore, *et al.*, 2015, Mavhundutse, *et al.*, 2014). Teaching practice is an integral part of the teacher education programme, as such, student teachers are required to spend three terms on teaching practice. For this research study, the choice of Masvingo District was also informed by literature which highlights the use of relevant constituencies that illuminate and inform understanding in a qualitative sample (Mertens, 2015) and also the bulk of student teachers from Morgenster Teachers' College were deployed in the district for teaching practice. Since the researcher was a full-time Head of the Teaching Practice Department at Morgenster Teachers' College, the choice of Masvingo District was convenient.

**Figure 3.1 Map of Zimbabwe showing Masvingo Province.**

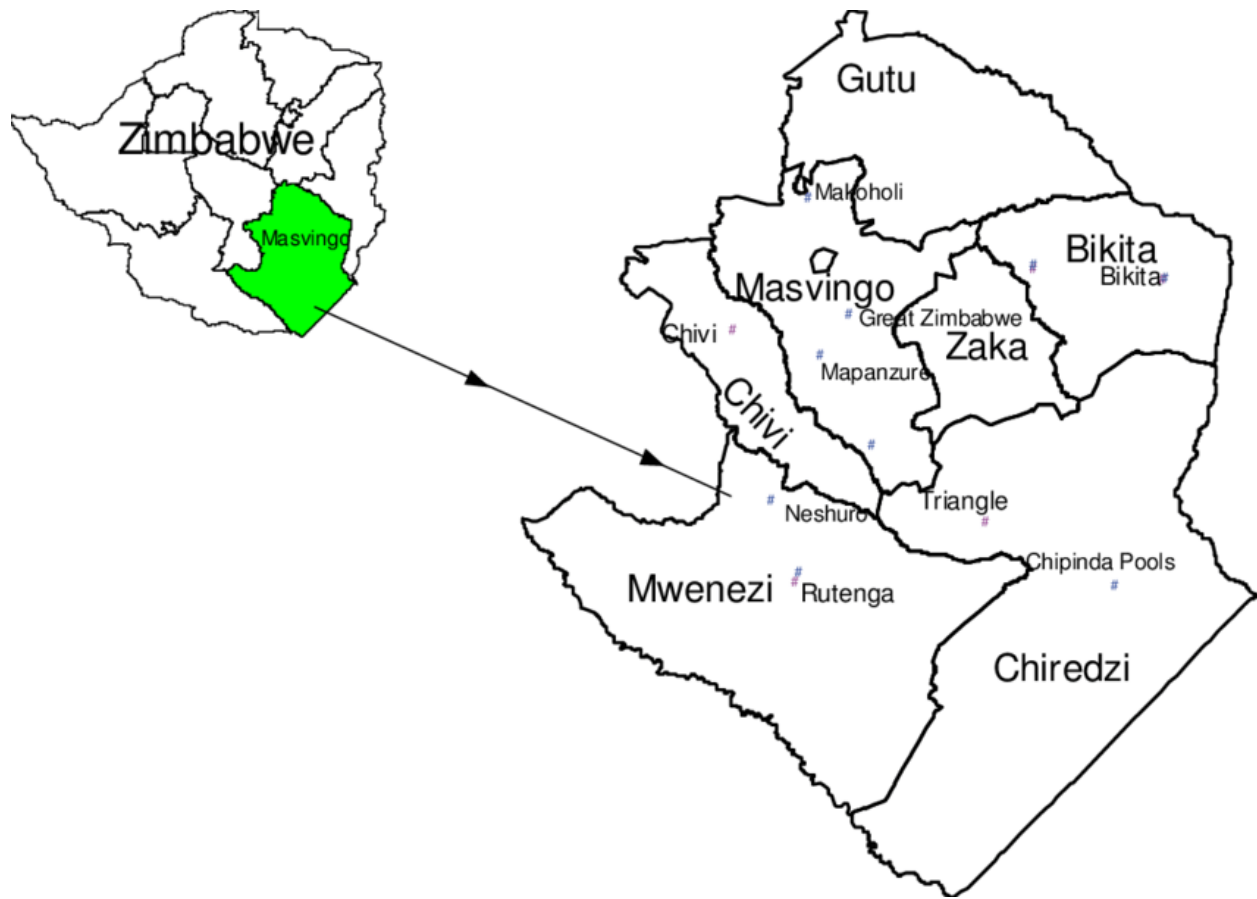


Figure 3.2 Map of Masvingo Province showing the seven districts. Morgenster Teachers' College is located in Masvingo District, five (5) kilometres southwest of Great Zimbabwe.

### **3.3 Research questions**

The main research question that guided data collection for this study was:

What is the student teachers' resilience on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe?

#### **3.3.1 Sub-research questions**

The following were the sub-research questions for this study:

1. What are the major COVID-19 induced teaching practice stressors in Masvingo District, Zimbabwe?

2. What are the factors that hinder the resilience of student teachers on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe?
3. What personal and contextual resources contribute to resilience outcomes in student teachers on teaching practice in COVID-19 era in Masvingo District, Zimbabwe?
4. What kind of support do student teachers on teaching practice receive in the COVID-19 era in Masvingo District, Zimbabwe?

**Table 3.4 Overview of the research methodology**

Title	Exploring student teachers' resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe
Research Approach	Qualitative approach <ul style="list-style-type: none"> <li>• Naturalistic Phenomenological Philosophy</li> <li>• Reality is multi-layered, interactive and a shared experience</li> </ul>
Research Paradigm	Social Constructivism <ul style="list-style-type: none"> <li>• Subjective interpretation of reality</li> </ul>
Research Design	Phenomenological research study strategy Context is a powerful determinant of both causes and effects <ul style="list-style-type: none"> <li>• Interpretive analysis</li> <li>• Uniqueness of events</li> <li>• Lived experiences of individuals</li> </ul>
Data Collection	After obtaining ethics approval (UFS-HSD2022/0020/22) from the University of the Free State's General/Human Research Ethics Committee I sought permission to conduct the study from the Ministry of Primary and Secondary Education. Permission to visit the schools was sought from the Masvingo Provincial Education Director and the Masvingo District Schools Inspector. The researcher sought permission to conduct the interviews and focus group discussions from the school heads of the selected schools. Each participant completed and signed a consent form and participation was voluntary.
Mechanisms for selection of participants	Population <ul style="list-style-type: none"> <li>• All mentors in Masvingo District and all student teachers on teaching practice from Morgenster Teachers' College</li> </ul> Sample size <ul style="list-style-type: none"> <li>• Six (6) student teachers' mentors</li> <li>• 21 student teachers on teaching practice</li> <li>• Total: 27 participants</li> </ul> Sampling Methods Convenient sampling <ul style="list-style-type: none"> <li>• One (1) Teachers' College</li> </ul> Purposive sampling <ul style="list-style-type: none"> <li>• Three (3) primary schools</li> </ul>

Title	Exploring student teachers' resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe
	<ul style="list-style-type: none"> <li>• Six (6) student teachers' mentors</li> <li>• Twenty-one (21) student teachers on teaching practice</li> </ul>
Data Generation Methods	Semi-structures interviews <ul style="list-style-type: none"> <li>• 6 student teachers' mentors</li> <li>• 10 student teachers</li> </ul> Focus Group Discussion <ul style="list-style-type: none"> <li>• 21 student teachers</li> </ul>
Instrumentation	A semi-structured interview protocol and a focus group discussion guide were constructed. My supervisor helped in validating the data collection instruments. The data collection instruments were used in a pilot study that included two schools in Masvingo District, four students' mentors and eight student teachers. The four mentors were chosen due to their vast experience in mentoring student teachers in the COVID-19 era. Student teachers selected were doing their third term on teaching practice in the COVID-19 era.
Data Analysis and Presentation	Qualitative Data Analysis <ul style="list-style-type: none"> <li>• Interpretive phenomenological analysis (IPA): the seven phases of interpretive phenomenological analysis (IPA)</li> <li>• Figures and tables used as adjuncts to the discussions</li> </ul>
Quality Assurance	<ul style="list-style-type: none"> <li>• Triangulation</li> <li>• Accurate reporting of findings</li> <li>• Low-inference descriptors</li> <li>• Member- checking</li> </ul>
Ethical Considerations	Participants completed and signed consent forms voluntarily and maintained the right to withdraw without any negative consequences. Informed consent, privacy, anonymity, confidentiality, non-maleficence and beneficence were maintained throughout the study. Privacy, anonymity, and confidentiality were upheld through pseudonymisation to make the data secure (POPIA Act 4 of 2018). The WHO and the government of Zimbabwe's standard protocols for the prevention of the spread of COVID-19 were adhered to throughout the study.

### 3.5 Research Approach

The research study sought to explore student teachers' resilience on teaching practice in the COVID-19 era, focusing on the COVID-19 induced teaching practice stressors, personal risk and contextual risk factors hindering the resilience of student teachers, personal and contextual resources that promote the resilience of student teachers and the support student teachers on teaching practice receive in the COVID-19 era. Given the above facts, the qualitative research approach was in this context deemed as the most appropriate approach.

This research study adopted a qualitative research approach. Leavy (2017) asserts that qualitative research is based on a naturalistic phenomenological philosophy that views reality as multi-layered, interactive and a shared experience. Qualitative research is a form of interpretative inquiry in which researchers make an interpretation of what they see, hear and understand (Creswell, 2014). This implies that qualitative research methodology allowed the researcher to generate data in the field at the site where participants experience the problem under study. In qualitative research, different groups are said to construct their different realities and these social constructions influence how they understand their worlds, what they perceive as normal and abnormal and how they should act (Johnson & Christensen, 2014). Qualitative research allowed the researcher to explore and understand the meaning individuals or groups ascribe to the student teachers' resilience on teaching practice in COVID-19 era (Creswell, 2014). This is the concept of empathetic understanding (Johnson & Christensen, 2014). The famous sociologist Marx Weber called the idea of understanding something from the participant's view point *verstehen* (Weber, 1968) in (Johnson & Christensen, 2014). Qualitative research enabled the researcher to understand the insiders' perspectives of the participants and their cultures through direct personal face-to-face contact.

Schumacher and McMillan (2014) assert that qualitative research is based on a naturalistic phenomenological philosophy that views reality as multi-layered, interactive and a shared experience. In addition, qualitative researchers seek an understanding of the lived experiences in real situations considering the physical, intellectual and emotional environment (Chisaka *et al.*, 2013). Qualitative researchers tend to collect data in the field at the site where participants experience the problem under study (Creswell, 2014). This demonstrates that qualitative research helped the researcher to learn the perspectives of the participants, and to illuminate the inner dynamics of situations that are invisible to outsiders on the student teachers' resilience on teaching practice in the COVID-19 era (Magwa, S. & Magwa, W., 2015). Qualitative research enabled the researcher to gather first-hand information through face-to-face interaction by actually talking directly to participants and seeing them behave and act within their context. Qualitative methodology seeks to understand the meanings of the events from the informants' viewpoints (Magwa, S. & Magwa, W., 2015). Since the current study sought to explore the student teachers' resilience on teaching practice in COVID-19 era, a qualitative methodology

was viewed as most appropriate as it facilitated an extensive exploration of the experiences of the student teachers' resilience on teaching practice in COVID-19 era.

Creswell (2014) posits that a hallmark of all good qualitative research is the report of multiple perspectives that range over the whole spectrum of perspectives. Qualitative researchers study behaviour naturally and holistically as such they try to understand multiple dimensions and layers of reality, such as types of people in a group, how they think, how they interact, their norms and how these dimensions come together holistically to describe the group (Johnson & Christensen, 2014). Through the semi-structured interviews and focus group discussion with the participants, the researcher was able to accommodate multiple perspectives and versions of the truth on student teachers' resilience on teaching practice in COVID-19 era. In light of the above, the qualitative methodology was regarded as the most suitable research approach for the current research study.

### **3.6 Research Paradigm**

Researchers approach their studies with a certain paradigm or worldview, a basic set of beliefs or assumptions, concepts, values and practices that guide their enquiries (Johnson & Christensen, 2014). A research paradigm is a shared worldview that communicates the beliefs and values of a discipline and it directs how problems are solved (Mertens, 2015). A paradigm, therefore, denotes a master plan to look at a problem to find the answer to the problem

The research paradigm adopted for this is social constructivism. The social constructivist paradigm is also known as the interpretive, symbolic or hermeneutic paradigm and its proponents believe that knowledge is a human construction, a mental representation and that there are multiple constructions of any situation (Creswell, 2014). Relying on the work of Schutz, Berger & Luckman argued that all of our understanding and knowledge is socially constructed through the creation of our own reality through social interactions, relationships and experiences (Leavy, 2017). The social constructivist school of thought posts that knowledge is socially constructed (McLeod, 2019) in social constructivism; new knowledge is obtained through interaction with other social beings. In this research, the researcher and the participants constructed knowledge and meanings on COVID-19 induced teaching practice stressors, personal and contextual risk factors that hinder the resilience of student teachers and personal and contextual resources that promote the resilience of student teachers on teaching practice in the COVID-19 era. Creswell

(2014) asserts that social constructivism is an approach to qualitative research. As such, the goal of constructivist researchers is to rely as much as possible on the participants' views of the situation under study. People create knowledge and attach meanings to their lived experiences (Olusegun, 2015). For this study participants shared their lived experiences on the COVID-19 induced teaching practice stressors, personal and contextual risk factors that hinder the resilience of student teachers and personal and contextual resources that promote the resilience of student teachers on teaching practice in the COVID-19 era and the support received by student teachers on teaching practice which cultivated their resilience. The social constructivist paradigm fits well in this study on exploring student teachers' resilience on teaching practice in the COVID-19 era because of its concern with individual participants, their experiences and the meanings that they assign to their experiences (Pretorius, 2013).

Furthermore, social constructivists believe that individuals develop subjective meanings of their experiences that are varied and multiple, as such, the researcher looks for complexity of views rather than narrowing meanings into few categories or ideas (Creswell, 2014). Social constructivism is appropriate for this study because of its subjective interpretation of reality (Magwa, S. & Magwa, W. 2015).

Creswell (2014) asserts that social constructivism is seen as an approach to qualitative research. As such, the goal of constructivist researchers is to rely as much as possible on the participants' views of the situation under study Creswell (2014). Social constructivism enabled the researcher to focus on the specific contexts in which people live and work in order to understand the historical and cultural settings of the participants. This implies that situations are fluid and changing rather than fixed and static; events and behaviour evolve over time and richly influenced by the context (Sefotho, 2015). The researcher chose social constructivism because it provided rich, substantial and broad descriptions of issues and the uncovering and capturing not merely what people think, feel or do but also the why and how of their social reality (Pretorius, 2013).

In addition, social constructivists believe that individuals develop subjective meanings of their experiences that are varied and multiple, as such, the researcher looks for complexity of views rather than narrowing meanings into few categories or ideas (Creswell, 2014). Through semi-structured interviews and focus group discussions used in this study, the participants were able to

express subjective meanings of their experiences that were varied and multiple. However, multiple viewpoints would result in the participants bringing to the researcher their own unique interpretations of the world, leading to misapprehension (Pretorius, 2013). In this research study, the researcher concentrated on data that were relevant to exploring student teachers' resilience on teaching practice in the COVID-19 era.

As a social constructivist researcher, the researcher was more concerned about uncovering knowledge about how people feel and think in the circumstances in which they find themselves than making judgments about whether those thoughts and feelings are valid. Creswell (2014) posits that social constructivist researchers recognize their interpretation and they position themselves in the research to acknowledge how their interpretation flows from their personal, cultural and historical experiences. Data collection methods such as semi-structured interviews and focus group discussions brought the researcher into close contact with the participants in order to uncover knowledge about how people feel and think about COVID-19 induced teaching practice stressors, personal and contextual risk factors that hinder the resilience of student teachers, personal and contextual resources that promote resilience of student teachers on teaching practice in the COVID-19 era and the support student teachers receive on teaching practice in COVID-19 era.

The social constructivist paradigm fits well in this study because it encourages the use of multiple data collection strategies to enhance rigour in research (Mertens, 2015; Olusegun, 2015). The use of semi-structured interviews and focus group discussions qualifies this research study to be informed by the social constructivist paradigm. Multiple methods of data collection used by the researcher enabled triangulation of data that allowed significant insights to emerge on the topic under study (Ponelis, 2015).

### **3.7 Research design**

Research designs are plans and procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis (Creswell, 2014). A research design is a plan, a recipe or a blueprint describing conditions and procedures for collection of data (Mertens, 2015). The research design refers to the overall strategy that a researcher chooses to integrate the different components of the study in a coherent and logical way, thereby ensuring effective addressing of the research problem (Shannon-Baker, 2016). In this study, a research

design therefore denotes a research strategy blueprint highlighting conditions, procedures of data collection and analysis so that the researcher addresses the research problem effectively.

The current study adopted the phenomenological research study strategy of inquiry. Phenomenology is a form of qualitative research in which the researcher attempts to understand how one or more individuals experience a particular phenomenon (Johnson and Christensen, 2014). Thus, within qualitative research, phenomenological studies emphasize interpretative analyses and are mostly devoted to capturing the uniqueness of events (Yin, 2016). Phenomenological research is a design of inquiry coming from philosophy and psychology in which the researcher describes the lived experiences of individuals about a phenomenon as described by participants (Leavy, 2017). One of the major characteristics of phenomenological research is the use of various sources and techniques in the data collection process (Nieuwenhuis, 2015). Phenomenological research provided the researcher an opportunity to employ varied methods of data collection such as semi-structured interviews and focus group discussions in which crystallization and dependability, credibility and trustworthiness of findings were enhanced (Nieuwenhuis, 2015). Phenomenology as a research strategy enabled the participants to air out their views on student teachers' resilience on teaching practice in the COVID-19 era, through semi-structured interviews and focus group discussions, which are key data generation methods in qualitative research. The strength of a phenomenological research study is that it observes effects in real contexts recognizing that context is a powerful determinant of both causes and effects (Cohen, Manion & Morrison, 2018).

The goal of a phenomenological researcher is to obtain a view into the research participants' life-worlds and to understand their lived experiences (Johnson and Christensen, 2014). Phenomenological research procedures enabled the researcher to study a smaller number of participants, these were twenty-one (21) student teachers on teaching practice and six (6) student teachers' mentors to give a total of twenty-seven (27) participants, through extensive and prolonged engagement to develop patterns and relationships of meaning (Moustakas, 1994) in (Creswell, 2014). The phenomenology research strategy was regarded relevant for this study as it enabled the researcher to enter the inner world of each participant to understand his or her perspective and experience. This study seeks to understand the individual experiences, the

context of their experiences and the resilient responses they employed amidst COVID-19 induced teaching practice stressors.

The basic tenet of a phenomenological research design relevant to this study on exploring student teachers' resilience on teaching practice in the COVID-19 era is that it refutes the concept of deductive research in favor of inductive research, which is in line with the qualitative research approach (Nieuwenhuis, 2015). Phenomenological research design enabled the researcher to seek solutions to the problem under study through interaction with the participants in their everyday lives, findings were not obvious and limited but divergent views were gathered (Nieuwenhuis, 2015). Thus, taking into consideration the participants' lived experiences in their natural setting, the researcher interacted with the participants flexibly face-to-face and heard their views on student teachers' resilience on teaching practice in the COVID-19 era. A phenomenological research study strategy was employed to give impetus to this study as it embraces qualitative research data collection methods that call for inductive data analysis approaches, multiple methods and subjective research findings (Creswell, 2014).

### **3.8 Data Collection Methods**

This subsection presents the methods of data collection used in this qualitative research. Data gathering techniques available to the qualitative researcher include documents, observation, interviews and focus group discussions (Nieuwenhuis, 2015). There is a variety of data generation methods available such as interviews, focus group discussions, document analysis and observations (Sefotho, 2015). The current research study employed semi-structured interviews and focus group discussions as data collection methods. Multiple sources of data such as semi-structured interviews and focus group discussions were used rather than relying on a single data source (Creswell, 2014). Semi-structured interviews and focus group discussions used in this study emanate from the social constructivist paradigm. Deciding on a data collection method depends on the worldview that informs the study (Datts, 2016). As such, the social constructivist paradigm embraces qualitative data collection methods. Semi-structured interviews and focus group discussions go hand in glove with the qualitative research approach, social constructivist paradigm and phenomenological research strategy as they encourage subjectivity and flexibility in data generation (Nieuwenhuis, 2015).

### **3.8.1 Instrumentation**

The researcher designed two research instruments for the collection of relevant data for this study. Research instrument construction was guided by extensive literature reviewed in line with the research questions for this study. The reviewed literature explored the teaching practice stressors induced by COVID-19 pandemic, factors that hinder the resilience of student teachers on teaching practice in COVID-19 era, personal and contextual protective factors that promote the resilience of student teachers on teaching practice in COVID-19 era and the support student teachers receive on teaching practice in COVID-19 era. This research study employed a semi-structured interview protocol and a focus group discussion guide as data collection tools. Semi-structured interviews and focus group discussions yield rich data, details and new insights (Magwa, S & Magwa, W., 2015). The two data-gathering techniques were vital in providing multiple data sources for the purpose of data triangulation (Maree, 2015).

The researcher sought advice on both the design and content validation from the supervisor and his two workmates who happened to be PhD students in the field of Educational Psychology.

### **3.8.2 Pilot Study**

The researcher carried out a pilot study in an endeavor to familiarize with the investigation, to consider the meticulous design of the research instruments and to establish the efficiency of the research tools (Creswell, 2014). The pilot study afforded the researcher ample opportunity to check the efficiency of administering the research instruments in exploring student teachers' resilience on teaching practice in COVID-19 era. Furthermore, pilot testing afforded the researcher a chance to assess and increase the consistency, soundness and feasibility of the research instruments (Cohen *et al.*, 2014). By conducting a pilot test, the researcher intended to identify logistical challenges (Cohen, *et al.*, 2014) that could emanate as a result of enforcement of COVID-19 restrictions. Purposive sampling was employed to select the site and individuals for this pilot study. The research instruments were pilot-tested at two (2) primary schools in Masvingo District involving four (4) student teachers' mentors and eight (8) student teachers who were on teaching practice in the selected schools. The individuals and a site for the study were selected because they could purposefully inform an understanding of the research problem and central phenomenon of this study (Shannon-Baker, 2016). Pilot testing was conducted at the two schools involving participants who were not included in the final sample (Yin, 2016). The

pilot study participants were considered ‘information rich’ and relevant for testing the trustworthiness of the research tools (Johnson & Christensen, 2014; Creswell, 2014).

In the wake of this pilot study, it emerged that the researcher needed to prepare the venues for the interviews and focus group discussions a day before. The venues needed to be assessed for their suitability in maintaining physical social distancing, and ventilation and also to be fumigated against COVID-19. From the pilot study, the researcher also realized the need to modify and simplify some of the questions to enhance the understanding of the participants. A few questions were removed completely as they were a duplicate of the other questions. Some of the psychological terms like ‘*self-efficacy*’ were simplified as most of the participants were not familiar with such terms. Furthermore, from the pilot study, it came to light that the time allocated for the semi-structured interviews and the focus group discussions was too little. Time allocated for semi-structured individual interviews was adjusted from a maximum of 45 minutes to between 1 hour and 1.5 hours while for focus group discussions was adjusted from 1.5 hours to between 2hrs and 2.5 hours.

### **3.8.3 Semi-structured interviews**

The current research study used semi-structured interviews as a data collection method (Ethics Approval: UFS-HSD2022/0020/22, Appendix A: 340; Appendix H: 351; Appendix I: 356). An interview is a two-way conversation, in which the interviewer probes the interviewee to collect data to learn about the ideas, beliefs, views, opinions and behaviors of the participants (Nieuwenhuis, 2015; Chisaka, 2014). An interview is a personal encounter that is dialogical, in which an interviewer asks questions to an interviewee (Johnson & Christensen, 2014). In this study, the advantage of semi-structured interviews was that they provided an opportunity for follow-up questions and further probing (Magwa, S. & Magwa, W. 2015). The lived experiences of the student teachers on teaching practice and student teachers’ mentors provided data about the COVID-19 induced teaching practice stresses, personal and contextual risk factors hindering resilience, personal and contextual resources that promote resilience and support student teachers received on teaching practice in the COVID-19 era. Semi-structured interviews were considered appropriate for this study as they accorded the researcher the opportunity to understand the world from the perspective of the participants (Barbour, 2013).

Furthermore, the semi-structured interview is a flexible tool for data collection, enabling multi-sensory channels to be used, these are, verbal non-verbal, spoken and heard (Cohen *et al.*, 2018). Semi-structured interviews enabled the researcher to collect data that could not be easily accessed using other methods, for example, data from gestures and facial expressions exhibited by participants when they expressed their feelings on COVID-19 induced teaching practice stressors. Semi-structured interviews are also in-depth interviews because they can be used to obtain in-depth information about a participant's thoughts, beliefs, knowledge, reasoning, motivations and feelings about a topic (Patton, 2015). Semi-structured interviews enabled the researcher to enter the inner world of the participants on student teachers' resilience on teaching practice in the COVID-19 era. The semi-structured interviews enabled the participants to air out their views on their interpretations of the world in which they live and to express how they regard situations from their point of view (Cohen, *et al.*, 2018).

The researcher conducted face-to-face semi-structured interviews using an interview protocol with twenty-one (21) student teachers on teaching practice and six (6) student teachers' mentors at their practicing schools which were their natural settings. The researcher was attentive to the responses of each participant and identified new emerging lines of inquiry that were directly related to the phenomenon being studied and explored through further probing because there was greater flexibility (Nieuwenhuis, 2015). Semi-structured interviews yielded the richest and most plentiful data and enabled the researcher to take into account non-verbal responses which were observable (Flick, 2014). The researcher managed to build trust with the student teachers on teaching practice and student teachers' mentors and established very good rapport and interpersonal relationships with the participants which made it easy for the interviewees to provide information about their inner worlds (Johnson & Christensen, 2014). However semi-structured interviews were time-consuming; researcher bias could be problematic and at the same time, it could be easy for the researcher to be sidetracked by trivial aspects that were not related to the study (Nieuwenhuis, 2015). In this study, the researcher kept the interview on track bringing the participant back when he or she went off on a topic that was not relevant to the research purpose and had to set aside own experiences to reduce researcher bias so as to understand the lived experiences of the participants (Cohen, *et al.*, 2018).

During the interviews the researcher ensured that all the interviewees adhered to the World Health Organization standard recommendations to prevent the spread of COVID-19, which include frequent cleaning of hands using alcohol-based hand rub or soap and water; covering the nose and mouth with a mask and maintaining physical social distancing (World Health Organization, 2020).

### **3.8.4 Focus Group Discussions**

This study employed focus group discussions as a technique for data collection (Appendix J: 360). A focus group discussion is a type of group interview in which a moderator leads a discussion with a small group of participants to examine in detail, how the group members think and feel about a topic (Johnson & Christensen, 2014). It is called a *focus* group because the moderator keeps the participants in the group focused on the topic being discussed through open-ended questions. Focus group discussions are a form of group interview though not in the sense of backwards and forwards between interviewer and group, the participants interact with each other rather than the interviewer, such that the views of the participants can emerge (Cohen *et al*, 2018). A focus group is comprised of six (6) to twelve (12) participants who are purposively selected because they can provide the kind of information of interest to the researcher (Patton, 2015). The purpose of using focus group discussions in this study was to garner the perspectives of student teachers on teaching practice and student teachers' mentors since they were in the situation being studied. The researcher regards the use of focus group discussions as an innovative way of exploring the topic through conducting in-depth interviews with a number of people at the same time (Mertens, 2015). Focus group discussions are extremely informative because participants feed off others' comments (Mertler, 2014). The focus group discussions allowed participants to interrogate and verify their views and those of other participants exploring the student teachers' resilience on teaching practice in the COVID-19 era. Focus group discussions allow participants to listen and reflect on what others say and further consider their standpoints (Mertens, 2015).

Three (3) focus group discussions with seven (7) student teachers each were conducted with student teachers on teaching practice in their practicing schools to give a total of twenty-one (21) student teachers. Mertens (2015) stressed the importance of confidentiality and anonymity over data generated from focus group discussions as the issue of collegiality may lead to the divulging

of important data by participants. To counter this, the researcher, reaffirmed the issue of confidentiality and also explained that the data were to be used for educational purposes only. Individuals that are more outspoken, groupthink and the difficulty of assessing the viewpoints of less assertive participants (Nieuwenhuis, 2015), may bias the data generated through focus group discussions. The researcher ensured that participants who were talkative did not dominate the discussion and that all participants were accorded a fair chance to contribute their views during the focus group discussions (Ritchie & Lewis, 2013). Focus group discussions were particularly relevant for this study because they generated data in a short space of time and low cost. In this research study, the focus group discussions were conducted with a group of seven participants each, under one roof and at the same time, using the equipment available. All participants should be able to congregate in the same place at the same time, which is particularly difficult if the participants live in geographically distant regions (Nieuwenhuis, 2015). The sampled student teachers on teaching practice were able to congregate in the same room at the same time since the focus group discussions were held at their practicing schools.

During the focus group discussions, the researcher ensured that all the participants adhered to the World Health Organization standard recommendations to prevent the spread of COVID-19; these include frequent cleaning of hands using alcohol-based hand rub or soap and water; covering the nose and mouth with a mask and maintaining physical social distancing (World Health Organization, 2020). All the interviews and focus group discussions were tape-recorded to capture all the details.

### **3.9 Mechanism for selection of participants**

#### **3.9.1 Population**

A population is a set of all elements, a large group to which a researcher wants to generalize the sample results (Johnson & Christensen, 2014). Neuman (2013) defines a population as the collectivity of study units which the researcher intends to study and make claims about. A population is the entire group of persons or set of objects and events the researcher wants to generalize the sample results (Punch & Oancea, 2014). Lammers and Badia (2013) define a population as “all members that meet a set of specifications or a specific criterion”. For this research, the population comprised all the student teachers from Morgenster Teachers’ College

who were on teaching practice and all the mentors in three districts where Morgenster Teachers' College deployed student teachers for teaching practice.

**Table 3.9.1 Population**

Target population	District A	District B	District C	Total
Number of mentors	1553	1820	250	3623
Number of student teachers	546	310	22	878
Total population per district	2099	2130	272	<b>4501</b>

As shown on Table 3.9.1, the target population comprised 3623 mentors and 878 student teachers on teaching practice giving a total population of 4501 possible participants. Having identified the population, the researcher went on to choose a representative sample.

### **3.9.2 Sample and Sampling Methods**

A sample is a proportion of the population, a slice of it (Barbour, 2013). Cohen, *et al.*, (2018) define a population as a subset of the total population such that the knowledge gained is representative of the total population under study. Population sampling makes exhaustive and intensive study possible without wasting time and money (Pandey & Pandey, 2015). Magwa, S. & Magwa, W., (2015) concur that sampling an entire population, as part of a research experiment is impossible due to time, expense and sheer number of participants. In this study, the organization of data collection was more manageable with a sample as fewer participants were involved saving time and money.

### **3.9.3 Sampling a Teachers' College**

This study employed non-probability sampling methods such as convenience sampling and purposive sampling. Researchers simply choose the sample from those to whom they have easy access (Cohen, Manion & Morrison, 2018) thus convenient sampling or accidental sampling involves choosing individuals to serve as participants. Maree & Pietersen (2015) assert that convenient sampling refers to situations when population elements are selected because they are easily and conveniently available. Convenience sampling was employed to sample one teachers' college because of its typicality and accessibility. The researcher worked at the college as a full-time Head of the Teaching Practice Department and the college had student teachers who were on teaching practice in the COVID-19 era. The researcher had to de-role in order to make sure that my position did not ethically influence participation of student teachers in this study (Patton,

2016). Student teachers signed invitation letters as well as consent forms which clearly stated that participation was voluntary and that student teachers were not going to be victimized if they refuse to participate or decide to withdraw participation. The sample helped the researcher collect useful information and data that would not have been possible using probability sampling techniques (Datts, 2016). For this research study, convenience sampling was easy to carry out, cheaper and not time-consuming. In this study, convenience sampling was used to sample one teachers' college in Masvingo District whose student teachers were on teaching practice in the COVID-19 era.

#### **3.9.4 Sampling schools, student teachers' mentors and student teachers**

In qualitative research, the samples are likely to be chosen in a deliberate manner known as purposive sampling (Patton, 2015). Purposive sampling is a non-random sampling technique in which the researcher solicits persons with specific characteristics to participate in a research study (Johnson & Christensen, 2014). Chisaka (2014) describes purposive sampling as identifying participants who provide relevant and plentiful data because they are, open and have an in-depth understanding of the phenomenon under study. In purposive sampling, the researchers handpick the cases to be included in the sample based on their judgment of their possession of the particular characteristics being sought (Barbour, 2013). According to Yin (2012), the goal of purposive sampling is to sample those participants that will yield the most relevant and plentiful data. This means that individuals and a site for the study are selected because they can purposefully inform an understanding of the research problem and central phenomenon in the study (Creswell, 2014). Given the nature of this study, purposive sampling offered the researcher the opportunity to purposefully select student teachers' mentors and student teachers on teaching practice in the COVID-19 era.

Purposive sampling was employed to sample three (3) primary schools located in Masvingo District, which are near Morgenster Teachers' College and had student teachers deployed for teaching practice from Morgenster Teachers' College. The three schools were deemed relevant as they were directly affected by the COVID-19 pandemic. Some mentors, student teachers and learners at the sampled schools contracted the COVID-19 pathogen. Additionally, purposive sampling was used to sample six (6) student teachers' mentors from the selected three primary schools. This means that two (2) student teachers' mentors were selected from each of the

selected three (3) schools. The students' mentors were sampled because of their vast experience in mentoring student teachers from Morgenster Teachers' College on teaching practice in the COVID-19 era. Thus, in purposive sampling, the researcher specifies the characteristics of a population of interest and then tries to locate persons who have those characteristics (Johnson & Christensen, 2014).

Furthermore, purposive sampling was used to sample student teachers who were on teaching practice in the COVID-19 era as they were affected and infected by COVID-19. The student teachers experienced the devastating effects of COVID-19 pathogen on their health, psychological well-being and teaching competencies. In this study, purposive sampling helped to sample knowledgeable people who had in-depth knowledge about the student teachers' resilience on teaching practice in the COVID-19 era. Thus, purposive sampling was used to hand pick data rich participants as well as access knowledgeable persons on the phenomenon under study (Flick, 2014). Hence, there was little benefit in seeking a random sample when most of the randomly sampled participants may be largely ignorant of particular issues and unable to contribute information on the topic under study, in this research study, a purposive sample was vital.

Purposive sampling is highly disposed to research bias and it is difficult to defend the representativeness of the sample (Pandey & Pandey, 2015). Though the parameters of generalizability in purposive sampling may be negligible, this is not the primary concern in such sampling; rather the concern is to acquire in-depth information from those who are in a position to give it (Cohen, Manion & Morrison, 2018). Seven (7) student teachers were sampled from each of the three (3) primary schools. For this research study, purposive sampling was used to sample twenty-one (21) student teachers who were on teaching practice in the COVID-19 era.

### **3.9.5 Sample size**

The sample size comprised twenty-one (21) student teachers from Morgenster Teachers' College who were on teaching practice in the COVID-19 era and six (6) student teachers' mentors to give a total of twenty-seven (27) participants. In qualitative research, it is more likely that the sample size will be small (Cohen, Manion & Morrison, 2018). The size of the sample may seem small but Ritchie, *et al.*, (2014) posit that samples in qualitative research are commonly small because of the homogeneous nature of the sample.

### **3.10 Data analysis, interpretation, reporting and quality assurance.**

#### **3.10.1 Data analysis and presentation**

Research data were analyzed using interpretive phenomenological analysis (IPA). IPA is grounded in phenomenology where researchers focus on the lived experiences of individuals and how they make sense of them within the context of their personal and social worlds with a particular emphasis on personal sense-making” (Smith & Nizza, 2021). Research data were analyzed using interpretive phenomenological analysis (IPA) which aligns well with the phenomenological research design (Smith & Nizza, 2021). IPA is guided by hermeneutics, a theory that acknowledges the subjectivity of interpretation (Patton, 2015).

Data analysis is the process that enables the researcher to make sense of the data collected by consolidating, reducing and interpreting what research participants would have said and what the researcher would have observed and recorded (Dube, 2015). In this study, qualitative data analysis tries to establish how participants make meaning of a specific phenomenon (*resilience*) by analyzing their perceptions, attitudes, understanding, knowledge, values, feelings and experiences in an attempt to approximate their construction of resilience of student teachers on teaching practice in COVID-19 era (Maree, 2015). Qualitative data analysis brings order and understanding of the topic under investigation since it involves breaking up the data into manageable themes, patterns, trends and relationships (Patton, 2015).

Qualitative data were collected through semi-structured interviews and focus group discussions. Data analysis involved compiling, disassembling, reassembling, interpreting and concluding (Yin, 2016). As a first step in data analysis, audiotape-recorded interviews and focus group discussions were transcribed verbatim. Transcription is the process of transforming qualitative research data, such as recordings of focus group discussions into typed texts (Smith & Nizza, 2021). Secondly, the researcher read through transcripts several times so as to familiarize with the data. After familiarizing with the data, the researcher re-played the audio tapes typing what was said into a word processing file.

In the third step, raw data were coded by the researcher using unique identification category names after the process of segmenting the raw data. The most crucial activity in analyzing

research data is that of coding or organizing related segments of data into thematic categories (Smith & Nizza, 2021). The coding process enabled the researcher to quickly retrieve and collect together all the data associated with the same thematic idea so that the sorted bits and pieces could be examined together and different cases compared easily (Maree, 2015). Re-assembling the codes enabled the researcher to identify robust categories which represented patterns that helped in developing thematic statements.

The fourth step involved the examination of coded and collated data extracts to identify themes of broader significance (Johnson & Christensen, 2014). At this stage, the researcher reviewed the coded data to identify areas of similarity and overlap between codes. Codes which seemed to share the same unifying features were clustered together by the researcher in order to generate themes and sub-themes (Lochmiller, 2021).

In the fifth step, themes are reviewed to ensure that the thematic map accurately and adequately represents the entire body of data (Dube, 2015). Reviewing the potential themes was done by the researcher for quality checking by checking themes against the collated extracts of data and to find out whether the theme works in relation to the collected data (Lochmiller, 2021). During the reviewing process, many themes and sub-themes were either merged with other main themes or discarded while others were renamed by the researcher.

In step six, the themes are refined and named to ensure that they are brief and adequately descriptive. The researcher further refined the themes by carefully reading through all the main themes and sub-themes, codes and extracts then the theme and sub-theme names were finalized to tell a story about the collected data (Dawadi, 2020).

In the seventh, the researcher looked for superordinate themes by comparing and contrasting themes that are found across cases, and created superordinate themes (Smith & Nizza, 2021).

The eighth step is the final step which involved writing up the final analysis and description of the findings. Tables and verbatim statements said by the participants were used as adjuncts to the discussions. Low inference descriptors promoted trustworthiness of this study (Creswell, 2014). The researcher made a great effort to provide a concise, coherent and logical account of the story that the data represented within and across themes by providing sufficient evidence or extracts which could capture the essence of the point the researcher was demonstrating (Dawadi, 2020).

Contributions from various scholars were correctly credited to avoid plagiarism (Johnson & Christensen, 2014).

### **3.10.2 Trustworthiness**

Trustworthiness is about making sure that the research findings are precise and exhaustive as seen from the perspective of the researcher, the participants and the readers (Patton, 2015). When qualitative researchers speak of research validity, they are usually referring to qualitative research that is plausible, credible, trustworthy and therefore defensible (Johnson & Christensen, 2014). In this qualitative study, the researcher used Lincoln and Guba's (1985) model to reduce any bias that might surface in the results so as to boost trustworthiness (De Vos, *et al.*, 2011). Therefore, in the process of ensuring trustworthiness in this study, the researcher employed the principles of dependability, credibility, transferability and conformability (Dube, 2015).

### **3.10.3 Dependability**

Dependability implies the extent to which the research findings could be repeated with similar participants in a comparable context (Mertens 2015). Dependability is a result of the researcher providing adequate dependable documentation on how the study was conducted which directs readers to follow and review all research procedures. To ensure dependability the researcher documented all research procedures employed in this research study in a way that would allow readers to trace the trail used and arrive at similar findings and conclusions (Flick, 2014). The researcher presented a detailed account of the data analysis procedure to enable readers to understand decisions made how data analysis was done as well as the process employed to reach the conclusion (Cohen, *et al.*, 2018, Ritchie & Lewis, 2013). In this view, the researcher used appropriate multiple data collection instruments which allowed crystallisation in identifying themes and sub-themes from various forms of information obtained from semi-structured interviews and focus group discussions (Barbour, 2013).

### **3.10.4 Credibility**

Credibility refers to the degree to which research findings are an accurate and authentic representation of the meanings of the research participants (Denscombe, 2014). Maree (2015) describes credibility as the appropriateness of the sourced data to correctly identify and describe issues being investigated. Credibility is an alternative to internal validity, in which the goal is to demonstrate that the inquiry was conducted in such a manner as to ensure that the participants

were accurately identified and described (Cohen, *et al.*, 2018). In this research, credibility ensures a relationship between how the research participants interpreted their lived experiences and how the researcher interpreted the participant's point of view (Mertens, 2015). To boost credibility the researcher carried out member checking progressively during the research on the initial documents, on data interpretations and on the findings (Maree, 2015; Yin, 2016). All the study participants consulted confirmed the appropriateness of the transcriptions and the meaning being portrayed, this could be attributed to the fact that most transcriptions were presented verbatim (Johnson & Christensen, 2014). In addition, the researcher also used triangulation for cross-checking information in order to ensure that the research findings from the participants' perspectives were credible (Ritchie & Lewis, 2013).

### **3.10.5 Transferability**

Cohen, *et al.*, (2018) and Mertens (2015) contend that qualitative studies do not seek generalisation but transferability of the research findings. Transferability is one factor that ensures the trustworthiness of research findings (Magwa, S. & Magwa, W., 2015). Since this study is a qualitative phenomenological study, the researchers' intention was not generalization but to get an in-depth understanding of the resilience of student teachers on teaching practice in COVID-19 era. In this study, the researcher used thick descriptions of participants, data collection methods and research findings, thus, enhancing the readers' understanding of how the findings could be applied to their own contexts and situations (Mertens, 2015). By using thick descriptions, the researcher ensured that the ultimate research methods could be applied to other similar contexts and situations in Zimbabwe and even beyond (Dube, 2015). To enhance transferability the researcher makes explicit connections to the cultural and social contexts that surround data collection (Smith & Nizza 2022,). In this study data was collected during the outbreak of the COVID-19 pandemic. Focus group discussions and semi-structured interviews were done with the student teachers and student teachers' mentors during working hours in the practicing schools. The social and cultural information surrounding data collection helps the reader to construct the scene that surrounds the research study, from the daily lives of participants to the way that implicit biases may affect their responses (Smith & Nizza, 2022). The details allow outside researchers and readers to make the transferability judgements themselves (Patton, 2015).

### **3.10.6 Confirmability**

In this study, confirmability entails that the data and the interpretation are not fabrications of the researcher's imagination (Mertens, 2015). Confirmability determines whether research findings are unbiased and it relates to how neutral and objective the research is to the extent that the research findings could be confirmed or corroborated by other researchers (Magwa, S. & Magwa, W., 2015). In order to verify the confirmability of the research findings, readers can easily track the qualitative data back to its source from the participants' responses (Dube, 2015). In this study, the qualitative data could be confirmed by tracking back to the interview questions and focus group discussion guides

### **3.10.7 Authenticity**

Maree (2015) posits that authenticity refers to the true description of people, events and places. In this research study, authenticity was achieved by employing the appropriate data-gathering tools that truly reported the participants' ideas, feelings and volition. Semi-structured interviews and focus group discussions were employed in order to reveal the actual perceptions and experiences of the participants on the resilience of student teachers on teaching practice in COVID-19 era.

### **3.10.8 Ways to address data analysis challenges**

#### **3.10.8.1 Critical reflexivity**

As the researcher was the Head of Teaching Practice Department and directly involved in teaching practice supervision, the researcher remained conscious of the possibility that own perceptions might hinder the generation of real data during the semi-structured interviews and focus group discussions. Through bracketing the researcher remained reflexive of his own standpoint and continually kept own views from the participants. Bracketing is the reflexive process that researchers use to reflect on their own assumptions and biases when interpreting the data (Tomkins, 2017). Bracketing helps researchers set aside personal biases and focus on understanding the perspectives of the participants (Patton, 2015). To a certain extent the researcher believes that he was able to create a reciprocal relationship with the participants, as he did not serve the role of a supervisor during the interviews and focus group discussions.

#### **3.10.8.2 Choosing a suitable data analysis method**

The researcher used interpretive phenomenological analysis (IPA) which is quite suitable for a phenomenological research study strategy. IPA has detailed and clear data analysis steps which helped the researcher to analyse the qualitative data from the participants' lived experiences. IPA helped the researcher to read through data, code it by identifying key phrases that relate to a similar topic and then look for overarching themes (Smith & Nizza, 2022).

### **3.10.8.3 Ensuring accuracy and consistency**

To ensure accuracy and consistency the researcher created a coding system to code common ideas in the text, (Adom, Hussein & Adu-Agyem, 2018).

### **3.10.8.4 Tackling loads of data**

The sheer amount of data to analyse was stressful and time-consuming so the researcher had to create more time for data analysis by going on study leave (Tomkins, 2017).

## **3.11 Ethical Considerations**

Ethical dilemmas were considered prior to conducting the research because doing research with human participants demands a clear set of ethical behaviors. Ethics are the principles and guidelines that help the researcher uphold the things we value (Johnson & Christensen, 2014). For this study, the researcher adhered to the American Educational Research Association (AERA) set standards designed specifically to guide the work of educational researchers (Cohen, Manion & Morrison, 2018; Johnson & Christensen, 2014). The five broad goals of AERA are; professional competence, integrity, scholarly responsibility, respect for people's rights, and social responsibility. In order to ensure researcher competence and integrity, utmost scholarship was considered to avoid any form of deception and to protect the privacy of the participants (Johnson & Christensen, 2014). Accordingly, informed consent, privacy, anonymity, confidentiality, non-maleficence and beneficence were maintained throughout the study (McMillan & Schumacher, 2014). Throughout this research study, the researcher was always honest and trustworthy and never jeopardised the welfare of the participants physically, socially or psychologically.

### **3.11.1 Permission**

Cohen *et al.*, (2018) advise that for easy access into the field, researchers need to obtain permission from the authorities starting from the higher offices. Before conducting the research,

ethical clearance was applied for by the researcher from the University of the Free State's Faculty of Education Ethics Board. Ethical clearance number (UFS-HSD2022/0020/22) was granted by the University of the Free State's General/Human Research Ethics Committee. Adherence to the code of ethical guidelines of the Faculty of Education was upheld.

Furthermore, permission was sought from the Ministry of Primary and Secondary Education in Zimbabwe prior to carrying out the research. In addition, permission to visit the schools was sought from the Masvingo Provincial Education Director and the Masvingo District Schools Inspector. The researcher sought permission to conduct the interviews and focus group discussions from the school heads of the selected schools upon production of the ethical approval from the University of the Free State and authorization letters from the Ministry of Primary and Secondary, the Provincial Education Director, Masvingo Province and the District Schools Inspector, Masvingo District.

### **3.11.2 Informed Consent**

Informed consent is an ethical requirement that demands that the research participants be allowed to choose whether they want to participate in the study (Magwa and Magwa, 2015; Johnson & Christensen, 2014). The participants give their consent to take part in a research study after receiving honest information about its procedures, risks and benefits in order for them to make informed decisions on whether to participate or not (Cohen, Manion & Morrison, 2018; Chikutuma, 2013). In this study, the researcher informed the selected participants about the purpose of the study, the possible risks and benefits of participating in the study and was informed of their freedom to choose to participate or not in the study. The researcher made the participants aware of their freedom to either refuse participation or to withdraw (Johnson & Christensen, 2014). In this study, informed consent for participation was voluntary and given without any direct or indirect coercion and inducement, consent was based on an adequate briefing given to the participants about the details of the research study by the researcher (Magwa, S. & Magwa, W., 2015). After the adequate briefing, the selected participants' signed consent forms consenting to their participation in the study and also to the recording of audios during semi-structured interviews and focus group discussions.

### **3.11.3 Confidentiality and anonymity**

Confidentiality is an attempt to detach from research records any elements that might indicate participants' identities (Mertens, 2015). In this research, respecting the privacy of research participants is at the heart of the conduct of ethical research practices (Johnson

Christensen, 2014) so anonymity was considered the best way to protect privacy because anonymity means that the identities of the participants were not revealed by the researcher to anyone (POPIA Act 4 of 2018). To ensure confidentiality, anonymity and privacy the researcher used pseudonymisation instead of the real names of the participants and institutions so as to conceal the identities of the institutions and the research participants (POPIA Act 4 of 2018). In this study, the audio tapes and transcripts were kept under lock and key and only accessible to the researcher.

### **3.11.4 Non-maleficence**

According to Cohen *et al.*, (2018), non-maleficence (do no harm) is enshrined in the Hippocratic Oath in which the principle of *primum non nocere* (first of all, do no harm) is held as a guiding precept. Harm to participants may include embarrassment, irritation, anger, emotional stress, loss of self-esteem, negative labeling, invasion of privacy and damage to personal dignity (Cohen, *et al.*, 2018; Johnson & Christensen, 2014). In this study, research participants who responded to the semi-structured interview questions and engaged in focus group discussions were not exposed to any harm (Maree, 2015) since sensitive and private information was highly reviewed and appropriately discussed. The researcher ensured that none of the participants was exposed to any harm by not asking private and sensitive questions. Furthermore, the researcher fumigated the venues for the interviews and focus group discussions and gave the participants masks, sanitizers and gloves to protect them against the COVID-19 virus. The researcher ensured that the World Health Organization and the government of Zimbabwe's standard protocols for the prevention of COVID-19, such as maintaining physical social distancing, proper masking up and washing of hands using alcohol-based sanitizers were adhered to throughout the data gathering process.

### **3.12 Summary**

The foregoing chapter described the paradigmatic viewpoints and the research design the researcher used in this study. In this regard, the qualitative research approach was used and

social constructivism as paradigm was adopted. The chapter also described the phenomenological research study strategy of inquiry which emphasizes interpretive analysis of qualitative data. In addition, the chapter further highlighted the mechanisms for the selection of participants and the data collection methods that the researcher used to explore student teachers' resilience on teaching practice in COVID-19 era. In this regard, convenience sampling and purposive sampling were used to select the participants while semi-structured interviews as well as focus group discussions were employed to collect data. The chapter outlined the seven phases of interpretive phenomenological analysis (IPA) which were used to analyse qualitative data. Trustworthiness and ethical considerations were explicated. The subsequent chapter deals with data presentation, analysis and discussion.

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND DISCUSSION

#### 4.1 Introduction

This chapter analyses, presents, and discusses the qualitative data gathered through focus group discussions and semi-structured interviews. The chapter was organized into five main sections according to the main themes which emerged from the study. The first section deals with research findings on COVID-19 induced teaching practice stressors, and the second section deals with data on factors that hinder the resilience of student teachers on teaching practice in the COVID-19 era. Section three looks at data related to personal and contextual resources that contribute to resilience outcomes in student teachers on teaching practice in the COVID-19 era, while section four deals with data on the support student teachers on teaching practice receive in the COVID-19 era and section five deals with discussion of findings. Data gathered are summarized in tables as adjuncts to the discussion.

The current chapter presents the research findings of this study with a view of formulating answers to the following main research question and the subsequent sub-research questions.

The main research question was:

*What is the student teachers' resilience on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe?*

In an attempt to answer the main research question, the study was directed by the following subsidiary questions:

1. What are the major COVID-19 induced teaching practice stressors in Masvingo District, Zimbabwe?
2. What are the factors that hinder the resilience of student teachers on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe?
3. What personal and contextual resources contribute to resilience outcomes in student teachers on teaching practice in COVID-19 era in Masvingo District, Zimbabwe?
4. What kind of support do student teachers on teaching practice receive in the COVID-19 era in Masvingo District, Zimbabwe?

The themes, sub-themes and categories that emerged from the data collected through focus group discussions and semi-structured interviews were formulated on the basis of data obtained from the lived experiences of the participants. Themes, sub-themes and categories were identified during the thematic content analysis of raw data done using the seven levels of interpretive phenomenological analysis (IPA).

The researcher used verbatim quotations from the participants obtained during the focus group discussions and semi-structured interviews in order to add rigour to the study and also to substantiate the themes identified from the collected data. The number of the focus group discussion (FGD) and the interview sessions are presented in Table 4.1 below

**Table 4.1.1 Coding for excerpts that emanated from the focus group discussions and semi-structured interviews.**

Instrument	Code	Participant number	Transcription line number	Reference codes
Focus Group Discussion	FGDI	P01	01-07	FGD1:P01
	FGD2	P08	08-14	FGD2:P08
	FGD3	P15	15-21	FGD3:P15
Student Interviews	STIN	R01	01-10	STIN: R01
Student's Mentors Interviews	SMIN	R01	01-06	SMIN: R01

Twenty-seven participants were sampled from the total population to take part in this study. Three focus group sessions with seven student teachers in each session were held to give a total of twenty-one student teachers. Out of the twenty-one student teachers, ten took part in the semi-structured interviews. Six student teachers' mentors also took part in the semi-structured interviews. Thorough deliberations of the selection procedures of participants were presented in Chapter 3.

#### 4.1.2 Identification coding for the focus group discussions and semi-structured interviews

This segment gives an overview of the code names used to identify the participants, the venues, the instruments used and the gender of each participant.

**Table 4.1.2. Outline of codes for focus group discussion participants.**

Venue	Focus group discussions	Code name	Gender	Qualifications	Experience in years
School X	FGD1	FGD1: P01	Female	Post 'O' Level	One (teaching practice)
		FGD1: P02	Female	Post 'O' Level	One (teaching practice)
		FGD1: P03	Female	Post 'O' Level	One (teaching practice)
		FGD1: P04	Male	Post 'O' Level	One (teaching practice)
		FGD1: P05	Female	Post 'O' Level	One (teaching practice)
		FGD1: P06	Male	Post 'O' Level	One (teaching practice)
		FGD1: P07	Male	Post 'O' Level	One (teaching practice)
School Y	FGD2	FGD2: P08	Male	Post 'O' Level	One (teaching practice)
		FGD2: P09	Female	Post 'O' Level	One (teaching practice)
		FGD2: P10	Female	Post 'O' Level	One (teaching practice)
		FGD2: P11	Female	Post 'O' Level	One (teaching practice)
		FGD2: P12	Male	Post 'O' Level	One (teaching practice)
		FGD2: P13	Female	Post 'O' Level	One (teaching practice)
		FGD2: P14	Female	Post 'O' Level	One (teaching practice)
School Z	FGD3	FGD3: P15	Male	Post 'O' Level	One (teaching practice)
		FGD3: P16	Female	Post 'O' Level	One (teaching practice)
		FGD3: P17	Female	Post 'A' Level	One (teaching practice)
		FGD3: P18	Male	Post 'O' Level	One (teaching practice)
		FGD3: P19	Female	Post 'O' Level	One (teaching practice)
		FGD3: P20	Female	Post 'O' Level	One (teaching practice)
		FGD3: P21	Female	Post 'O' Level	One (teaching practice)

Code names such as FGD1: P01, FGD2: P08 and FGD3:P15 denote the focus group discussion, session number and participant number.

**Table 4.1.3 Outlines student teachers' mentors' semi-structured interview participants.**

Interview session number	Venue	Interviewee	Code name	Gender	Qualifications	Work experience in years
1	School X	Student teachers' mentor	SMIN: R01	Male	Diploma in Education	Ten
2	School X	Student teachers' mentor	SMIN: R02	Female	Diploma in Education	Six
3	School Y	Student teachers' mentor	SMIN: R03	Female	BED Early Childhood Development	Fourteen
4	School Y	Student teachers' mentor	SMIN: R04	female	BED Art and Design	Twelve
5	School Z	Student teachers' mentor	SMIN: R05	Male	BED History	Twenty-two
6	School Z	Student teachers' mentor	SMIN: R06	Male	Diploma in Education	Fifteen

Table 4.2.2 outlines the semi-structured interviewee demographic data by venue and the code names assigned for reference in this study. Code names SMIN: R01 to SMIN: R06 denotes semi-structured interview session number.

**Table 4.1.4 Outlines student teachers' semi-structured interview participants**

<b>Interview session number</b>	<b>Venue</b>	<b>Interviewee</b>	<b>Code name</b>	<b>Gender</b>	<b>Qualifications</b>	<b>Work experience in years</b>
1	School X	Student teacher	STIN: R01	Female	Post 'O' Level	One (teaching practice)
2	School X	Student teacher	STIN: R02	Male	Post 'O' Level	One (teaching practice)
3	School X	Student teacher	STIN: R03	Female	Post 'O' Level	One (teaching practice)
4	School Y	Student teacher	STIN: R04	Male	Post 'O' Level	One (teaching practice)
5	School Y	Student teacher	STIN: R05	Female	Post 'O' Level	One (teaching practice)
6	School Y	Student teacher	STIN: R06	Female	Post 'O' Level	One (teaching practice)
7	School Z	Student teacher	STIN: R07	Female	Post 'A' Level	One (teaching practice)
8	School Z	Student teacher	STIN: R08	Female	Post 'O' Level	One (teaching practice)
9	School Z	Student teacher	STIN: R09	Male	Post 'O' Level	One (teaching practice)
10	School Z	Student teacher	STIN: R10	Male	Post 'O' Level	One (teaching practice)

Table 4.1.4 outlines the semi-structured interviewee demographic data by venue and the code names assigned for reference in this study. Code names STIN: R01 to STIN: R10 denotes semi-structured interview session number.

In the next segment, the researcher presents the themes that emerged from the thematic content analysis of the raw data from the focus group discussions and the semi-structured interviews.

Theme 1: COVID-19 induced teaching practice stressors;

Theme 2: Factors that hinder the resilience of student teachers on teaching practice in the COVID-19 era;

Theme 3: Personal and contextual resources that contribute to resilience outcomes in student teachers on teaching practice in COVID-19 era;

Theme 4: Support student teachers receive on teaching practice in the COVID-19 era.

**Table 4.2. Outline of themes, sub-themes and categories.**

<b>THEME 1: COVID-19 induced teaching practice stressors</b>				
<b>Sub-theme 1.1</b>	<b>Sub-theme 1.2</b>	<b>Sub-theme 1.3</b>	<b>Sub-theme 1.4</b>	<b>Sub-theme 1.5</b>
Impact of COVID-19 on teaching practice span	Risks associated with COVID-19 on student teachers on teaching practice	Pedagogy in COVID-19 era <b>Categories</b> 1.3.1 Face-to-face teaching methods 1.3.2 e-learning	Effects of lockdowns and school closures	State of preparedness for re-opening
<b>THEME 2: Factors that hinder resilience of student teachers on teaching practice in the COVID-19 era.</b>				
<b>Sub-theme 2.1</b>	<b>Sub-theme 2.2</b>	<b>Sub-theme 2.3</b>	<b>Sub-theme 2.4</b>	
Student teachers' teaching competencies	Poor relationships	Threats to student-teacher resilience <b>Categories</b> 2.3.1 Behaviour problems 2.3.2 adjustments to class and classroom organisation 2.3.3 work overload	Teaching Practice supervision <b>Categories</b> 2.4.1 Teaching practice supervision in COVID-19 era. 2.4.2 alternative ways to face-to-face teaching practice supervision	
<b>THEME 3</b>				
Personal and contextual resources that contribute to resilience outcomes in student teachers on				

teaching practice in COVID-19 era.								
<b>Sub-theme 3.1</b> Personal resources				<b>Sub-theme 3.2</b>			<b>Sub-theme 3.3</b>	
3.1.1 Emotions				Relational			Coping strategies	
3.1.2 Motivation				resilience as a				
3.1.3 Self-efficacy				contextual				
3.1.4 Social competence				resource				
3.1.5 Pedagogical Content Knowledge								
<b>THEME 4:</b> Support student teachers receive on teaching practice in the COVID-19 era.								
<b>Category</b>	<b>Category</b>	<b>Category</b>	<b>Category</b>	<b>Category</b>	<b>Category</b>	<b>Category</b>	<b>Category</b>	<b>Sub-theme</b>
<b>4.1.1</b>	<b>4.1.2</b>	<b>4.1.3</b>	<b>4.1.4</b>	<b>4.1.5</b>	<b>4.1.6</b>	<b>4.1.7</b>	<b>4.8</b>	<b>4.2</b>
School administrators	Student teachers' mentors	College lecturers	colleagues	community	Family and friends	Social media	Donors	Developing capacity for resilience in teachers

### 4.3 PRESENTATION OF THE RESULTS AND THE FINDINGS OF THE STUDY

This section presents the research results and findings of the study. Several themes emerged from the data generated through focus group discussions and semi-structured interviews. The themes were clustered into four major themes which have their related sub-themes and categories. Major themes, sub-themes and categories are explored in detail for thorough analysis and interpretation of the data gathered for this research study.

#### 4.3.1 Theme 1: COVID-19 induced teaching practice stressors.

Theme 1 captured the participants' views about the COVID-19 induced teaching practice stressors.

**Table 4.3.1 outlines Theme 1 and its sub-themes.**

<b>THEME 1: COVID-19 induced teaching practice stressors</b>				
<b>Sub-theme 1.1</b>	<b>Sub-theme 1.2</b>	<b>Sub-theme 1.3</b>	<b>Sub-theme 1.4</b>	<b>Sub-theme 1.5</b>
Impact of COVID-19 on teaching practice span	Risks associated with COVID-19 on student teachers on teaching practice	Pedagogy in COVID-19 era <b>Categories</b> 1.3.1 Face-to-face teaching methods 1.3.2 e-learning	Effects of lockdowns and school closures	State of preparedness for schools re-opening

During focus group discussions and semi-structured interviews, participants aired out their views on COVID-19 induced teaching practice stressors. Sub-themes such as the impact of COVID-19 on teaching practice span, risks associated with COVID-19 on student teachers on teaching practice, pedagogy in COVID-19 era, effects of lockdowns and school closures, and then state of preparedness for schools reopening emerged from the main them. These five sub-themes and their categories were interrogated.

**4.3.2 Sub-theme 1.1: Impact of COVID-19 on teaching practice span.**

In this segment, the researcher reports on the participants’ views on the impact of COVID-19 on teaching practice span. It emerged from the focus group discussions and the semi-structured interviews that student teachers were on teaching practice for an extended period of time. Under normal circumstances, student teachers are required to be on teaching practice for three terms which is one year. Most participants reported that the student teachers were on teaching practice for four terms or for one year and a term. The teaching practice period was prolonged by a term or by four months due to the national lockdowns which consequently resulted in school closures. During the focus group discussions and the semi-structured interviews, all the participants revealed that the student teachers endured a lengthy teaching practice period. The following extracts can help illustrate the participants’ views:

*We were on Teaching Practice for one year and four (4) months due to lockdown induced by COVID-19. We had several encounters of lockdowns due to COVID-19 and also the*

*school holidays made the teaching practice period to be extended”*. (Participant FGD2: P10).

In corroboration another participant said:

*I have been on T.P. for 4 terms instead of 3 terms because of COVID-19, which interrupted schooling through lockdowns. Schools were closed as a measure to contain the spread of the COVID-19 virus.* (Respondent STIRN3:07).

Furthermore, Participant STIN: R09 claimed that:

*I did my teaching practice for 4 terms instead of three terms because there were several lockdowns caused by the COVID-19 pandemic.*

During a semi-structured interview session, one of the student teachers’ mentors confirmed that:

*Student teachers have been on teaching practice for one (1) year and four (4) months due to complications caused by COVID-19 such as prolonged lockdowns.* (Participant SMIN: 04).

The above extracts show that the teaching practice period was extended due to national lockdowns which resulted in school closures. National lockdowns and school closures were done to try and curb the spread of the COVID-19 pandemic however this prolonged the teaching practice period and caused anxiety on the student teachers. Student teachers had to endure an extended teaching practice period. Under normal circumstances, the teaching practice period should only last for three terms but student teachers were on teaching practice for four terms due to school closures caused by the COVID-19 pandemic.

Participant FGD2: P14 pointed out that:

*The first term of our teaching practice was only six weeks long so it was disregarded by the University of Zimbabwe leading to an extended teaching practice period. The term was shortened by the school closures caused by the COVID-19 pandemic so we did not have enough time to practice teaching thus why the term was disregarded.*

In addition, ParticipantFGD3: P18 claimed that:

*We remained on teaching practice because we were not externally examined by external assessors from the University of Zimbabwe due to COVID-19. Travel restrictions and the school closure made it difficult for external assessors to visit our schools for teaching practice external examining so we could not complete teaching practice in three terms.*

The verbatim quotes reveal that COVID-19 pandemic disrupted teaching practice. Student teachers cannot complete teaching practice without being externally examined by external assessors from the University of Zimbabwe. Due to school closures caused by the COVID-19 pandemic, external assessors could not examine the student teachers. Student teachers remained on teaching practice for an extended period of time. The results show that the teaching practice period was extended by a term due to the national lockdowns and school closures caused by the need to curb the spread of the COVID-19 pandemic.

#### **4.3.3 Sub-theme 1.2: Risks associated with COVID-19 on student teachers on teaching practice.**

All the participants in this study described several risks associated with COVID-19 on student teachers on teaching practice in COVID-19 era. Most of the participants expressed their fears of contracting the COVID-19 virus, fear of getting sick and eventually death. Student teachers were at very high risk of contracting the COVID-19 virus due to a shortage of personal protective clothing, lack of masks and sanitizers. Data from the focus group discussion and semi-structured interviews revealed that most learners did not have masks so the virus could easily spread. Most classrooms were crowded due to very high pupil-teacher ratios so it was difficult to maintain physical social distancing in the classrooms putting the student teachers, students' mentors and learners at a very high risk of contracting the COVID-19 virus. Results showed that most participants lived in fear of contracting the virus, getting sick, dying and even spreading the virus to their family members back home. The participants were highly stressed and anxious due to the prevalence of the COVID-19 pandemic as the number of positive cases and deaths kept on rising in the country. The following extracts can help illustrate the participants' lived experiences on the risks posed by the COVID-19 pandemic to student teachers on teaching practice. During the focused group discussion, some of the participants expressed their sentiments as follows:

*“There was a danger of contracting the COVID-19 virus due to shortage of personal protective equipment and over-crowded classroom due to a high pupil-teacher ratio”*  
(Participant FGD3:P16).

Another participant explained:

*We were prone to contracting the COVID-19 virus as some learners, teachers and community members were not taking proper measures of preventing COVID-19. Personal protective equipment was inadequate since we had one thermometer for the whole school, one mask per term for each teacher and each learner* (Participant FGD3: P17).

During a semi-structured interview informant STIN: R02 postulated that:

*Being on T.P during COVID-19 era was stressful due to fear of contracting the virus for example I contracted the virus from learners. Teaching practice was prolonged which caused the government to cease our allowances. The other danger was that I would spread the virus to the learners, my family and fellow student teachers. Stigmatization and being isolated after suffering from COVID-19 were worrisome.* (Participant STIN: R02)

In addition, another respondent remarked:

*I was afraid of contracting the COVID-19 virus and eventually dying because several people were dying. I encouraged the learners to mask up properly and I also encouraged learners to mask up properly however some learners could not afford to buy masks.*  
(Participant STIN: R09).

In corroboration, another informant postulated:

*The COVID-19 situation was very difficult because our lives are in danger. Teachers, student teachers and learners are afraid of contracting COVID-19. Correct wearing of masks, sanitization and social distancing protected us against COVID-19. The school administration provided staff members with sanitizers, thermometers and masks. Every*

*learner was given three masks per term however they were not adequate (Participant SMIN: R05).*

From the extracts above it appears that the participants had the views that their lives were at risk as they were prone to contracting the COVID-19 virus due to a number of factors. Some of the factors included the shortage of personal protective clothing, lack of sanitizers, lack of masks and also lack of knowledge on the proper ways of putting on the masks. In schools where masks and sanitizers were provided, they were not enough to cover the whole term so still, the risk of contracting COVID-19 remained high. Most participants were at risk of contracting the COVID-19 virus, becoming sick or eventually dying. Those who contracted the COVID-19 virus were stigmatized and isolated by their workmates and learners which led to stress and depression.

The results found that crowded classrooms due to high pupil-teacher ratio and lack of money to buy masks and sanitizers were some of the risk factors which exposed student teachers on teaching practice to the COVID-19 virus. The verbatim quotes below help illustrate the opinions of the participants:

*The schools had no money to buy masks and sanitizers since most learners were not able to pay school fees due to joblessness caused by covid19. Most parents did not want to pay school fees as they were not sure of the continuation of learning as they had experienced school closure due to COVID-19.(Participant FGD2: P10).*

One of the student teachers echoed her sentiments as follows:

*The teaching practice allowances we got from government were not adequate enough to cater for our food, clothing, and stationery, paying teaching practice fees, worse still buying sanitizers and masks. (Participant FGD2: P14).*

Participant STIN: R03 said that:

*“I felt very unsafe and I was exposed to COVID-19. There was very high risk of contracting COVID-19 virus due to a very teacher pupil ratio of 1:56 learners. The school had in adequate masks and sanitizers so there was a very high risk of contracting COVID-19. My life was at risk and I could die any time due to COVID-19”.*

The extracts above are an indication that the participants lived in perpetual fear of contracting the COVID-19 pandemic as most classrooms were crowded and masks and sanitizers were in short supply. Due to poverty and joblessness caused by COVID-19 most parents could not afford to pay school fees or buy masks for their children. Most schools did not have money to buy masks, sanitizers and chemicals to fumigate classrooms because parents had not enough money to pay school fees. Student teachers received meager teaching practice allowances from the government which were not enough for them to buy masks and sanitizers for themselves and the learners. To make matters worse the teaching practice allowances were ceased by the government when the teaching practice period was extended by term. Teaching practice allowances are supposed to be paid to student teachers for only three terms but the teaching practice period ran into the fourth term due to school closures caused by COVID-19. Due to overcrowding in the classrooms, COVID-19 could easily spread among the learners, the student teachers and students' mentors putting their lives in danger.

#### **4.3.4 Sub-theme 1.3 Pedagogy in COVID-19 era**

The outbreak of the COVID-19 pandemic influenced the teaching methods student teachers on teaching practice could use during lesson execution. It emerged from the research results that some teaching methods promoted the spread of the COVID-19 virus while others were safe and curbed the spread of COVID-19. Results revealed that student teachers found it stressful to enforce the COVID -19 protocols and to effectively use teaching methods which did not spread COVID-19. Verbatim quotes below can help illustrate the views of the participants on the influence of COVID-19 on the suitability of the teaching methods to be used in the COVID-19 era.

##### **4.3.4.1 Face-to-face teaching methods**

During semi-structured interviews, most of the student teachers aired out their views as follows:

According to Respondent STIN: R01:

*“Group work was not done but learners needed to participate so as to understand the concepts. I used the lecture method and demonstration method so that learners observe social distancing however I had problems making learners to grasp the concept using these methods. I did not use experimental method since it encouraged crowding”.*

One of the participants expressed her view as follows:

*I used pair work to try to avoid interacting as a whole class as group work was not suitable as it spread the COVID-19 virus. I found it difficult to teach without engaging learners in group activities. Learners were not allowed to play outside during break time. Dramatization was discouraged as it spread the COVID-19 virus (Participant STIN: R02).*

In agreement Participant STIN: R07 said that:

*“Group work, drama and role played spread COVID-19 due to high pupil-pupil interaction. However, the lecture method and question and answer methods were safe to use since there is no physical interaction but were not effective which worried me”.*

In corroboration Respondent STIN: R03 postulated:

*The lecture method and demonstration method helped to curb COVID-19. I avoided role play and grouped work method as these methods easily spread COVID-19. However, the lecture method was not very effective since it did not promote active participation by the primary school learners.*

During the semi-structured interviews, the majority of the student teachers’ mentors reiterated that:

*Group work and field trips involved a lot of interaction and promoted the spread of COVID-19 and it was difficult for me to maintain physical social distancing, I felt hopeless. Lecture method was suitable because the learners do not have to come nearer the teacher and teacher also does not come into close conduct with the learners (Participant SMIN: R05).*

Another student teachers’ mentor expressed his views as follows:

*Experimentation method and dramatization spread COVID-19 because learners would remove masks so as to discuss with group members and share the apparatus. Discovery and Lecture methods were safe. The Ministry of Primary and Secondary Education*

*banned group work method, as it was the major driver of the COVID-19 pandemic. (Participant SMIN: R06).*

In contrast, Participant FGD1:P03 said:

*“While the lecture method and the demonstration methods did not spread COVID-19 they were not suitable for primary school learners because learners were passive and could not grasp the concept so I lost confidence in my teaching skills”.*

Respondent STIN: R02 added that:

*“I used pair work to try to avoid interacting as a whole class as group work was not suitable as it spread the COVID-19 virus. Learners were not allowed to play outside during break time. Dramatization was discouraged as it spread the COVID-19 virus”.*

During focus group discussion sessions, most of the student teachers thought that:

*Group work method, role play and dramatization spread COVID-19 because learners did not mask up properly and the moment you remind the learners to mask up the aerosols would have spread the virus already, this scenario really stressed me up (Participant FGD3: P16).*

Another participant added that:

*Lecture method does not spread COVID-19 since the teacher lectures to the learners and learners do exercises as individuals without interaction and physical contact. (Participant FGD2: P11).*

One of the participants echoed that:

*The demonstration method is safe since the teacher demonstrates while far away from the learners and no interaction is needed. Learners observe the demonstration done by the teacher while maintaining social distance however there was need for thorough preparation on the part of the teacher (Participant FGD2: P08).*

Furthermore, one of the student teachers claimed that:

*The Question-and-Answer Method does not spread COVID-19 since the teacher asks questions while learners remain seated maintaining social distance but as a student teacher one has to be well versed in the questioning techniques (Participant FGD3:P20).*

The above extract revealed that the lecture method, demonstration method and Socratic methods were very safe to use in the COVID-19 era. Most of the participants felt that these methods do not involve learners in interaction with each other which helped them to maintain the stipulated physical social distance. COVID-19 spread through close physical contact so the three methods above helped in the prevention of the spread of COVID-19. However, a few respondents thought that though the lecture method helped in the prevention of the COVID-19 pandemic, the method did not promote active participation by the learners which made it unsuitable for the teaching of primary school learners causing learners not to understand taught concept which stressed the student teachers. Some participants pointed out that the lecture method and the demonstration method were not child-centred so they were less effective in helping primary school learners grasp the concepts so most of the learners failed. Most of the participants felt that child-centred methods such as group work, experimentation and field trip methods were the major drivers of COVID-19 virus. These child-centred methods were even banned by the Ministry of Primary and Secondary Education making it difficult for the inexperienced student teachers to effectively use teacher-centred methods. Group work, experimentation, role play and field trip methods promoted active participation by the learners and high pupil-pupil interaction compromising the need to maintain physical social distancing. During group work, role play and dramatization, learners removed masks to talk or discuss with group members thereby exposing themselves to COVID-19. The student teachers' inability to enforce COVID-19 regulations and control the learners made them lose confidence. However, most of the participants pointed out that child-centred methods were very effective in teaching primary school learners though they were no longer using them in an attempt to curb the spread of COVID-19. A few participants pointed out that instead of using the group work method they resorted to using the pair work method but still they felt that they risked the spread of COVID-19. They felt that working in pairs reduced the chances of spreading COVID-19 virus. From the research results, it appears that COVID-19 heavily influenced the teaching methods to be used. The lecture method, demonstration method and Socratic methods were highly preferred as they did not promote the spread of COVID-19 they promoted the maintenance of physical social distancing while the group work method,

experimentation, role play, dramatization and field trip method were banned because it was difficult to maintain physical social distancing when using them. The results imply that student teachers experienced a number of stressful situations in teaching using methods which did not spread COVID-19.

#### **4.3.4.2 e-learning**

Research revealed that at the height of the spread of COVID-19 schools were closed. Teaching and learning were disrupted however to facilitate learning face-to-face teaching was transferred to e-learning. Teachers and learners had to quickly adapt to e-learning. The majority of the participants showed that e-learning was very effective in preventing the spread of COVID-19. E-learning promoted social distancing as learners learnt from the comfort of their home and there were no transport costs to and from the school for the student teachers, student teachers' mentors and the learners. However, the majority of the participants thought that e-learning was not effectively used in Zimbabwe due to various reasons. The following verbatim quotes can help illustrate the various opinions of the participants on the effectiveness of the use of e-learning. During semi-structured interviews one of the student teachers' mentors remarked that:

*E-learning is the most suitable methods since there is no physical contact between the teacher and the learners so COVID-19 does not spread. Through e learning learners were able to learn while at home and it did not spread COVID-19. However, e learning had its own challenges such as lack of smartphones at home i.e., expensive, network problems and data is expensive, no electricity in homes and constant power cuts. To solve the challenges bedeviling e learning there is need to build more network boosters to improve network coverage, provide free data and Wi-Fi to be installed by government in the schools. However due to the high rate of unemployment parents cannot buy smartphones and data bundles (Participant SMIN: R01).*

Another student teachers' mentor added this:

*E learning was a suitable method of teaching during school closures because of COVID-19 but only a ¼ of our learners benefited due to lack of connectivity and knowledge of e learning. There is no teacher - learner contact so the COVID-19 virus does not spread and at the same time, learning took place. E learning is expensive regarding the difficult*

*economic situation that we have even those who have the gadgets ran out of data and do not receive electricity due to constant power cuts. The government to provide free Wi-Fi and ICT gadgets to teachers and the learners. There is need for more training of teachers, student teachers and learners on the use of ICT in learning (Participant SMIN: R05).*

One of the student teachers' mentors added that:

*E-learning does not spread COVID-19 and there are no transport costs because children learn while in the comfort of their homes. However, learners may be carried away and others may not participate. Lack of electricity, internet connection and incompatible devices hinder the effectiveness of e learning. The lecture method is not suitable for primary school learners, as it does not promote understanding of concepts (Participant SMIN: R03).*

During the semi-structured interview one of the student teachers postulated that:

*E learning helped teachers and learners to use modern technology, which was an easy and safe way of communicating in the COVID-19 era. E-learning helped to curb the spread of COVID-19 virus. The college did not properly teach us to use E-learning so we had a lot of challenges using e-learning. I had to ask for help from mentors on how to use E-learning. Very few learners had access to smartphones and laptops was a big challenge. Lack of electricity in schools made it difficult to use e-learning. Schools could not afford to buy data for teachers and learners (Participant STIN: R02).*

In corroboration another student teacher remarked:

*E-learning is fast and efficient and there was less risk of contracting COVID-19 since learners got the information in the comfort of their homes. There is no physical contact with other people when I use e-learning. I was not adequately prepared to use e-learning since we were not well versed in using the Google class or zoom. Poor network connectivity and data bundle is too expensive for the learners. My school was a remote school so learners did not have cell phones to use for e-learning so they failed to access the information (Participant STIN: R03).*

Another student teacher interviewed added that:

*E-learning enabled teachers to cover the syllabus however some learners did not receive any information so they learnt nothing. E learning curb spread of COVID-19 because there was no face-to-face interaction. Subjects like P.E and V.P.A could not be done practically by learners through e-learning. The school was not electrified and bundles are expensive so e-learning was not a success (Participant STIN: R08).*

During focus group discussions, most of the student teachers were of the opinion that:

*E-learning reduces pressure on the part of the teacher because we use it to cover concepts while learners are at home due to lockdowns and reduces the spread of COVID-19(Participant FGR08).*

Another participant expressed her sentiments as follows:

*Through e-learning some learners managed to get information from the teacher however most learners couldn't access the bundles and had no smart phones, so they did not use e-learning. (Participant FGD2:P10).*

One of the participants expressed her views as follows:

*E-learning is something new to us so even the student teachers couldn't use e-learning to teach through e.g., Google class. We need to be educated on how to use e-learning. Power cuts and lack of internet connectivity in the rural areas hindered the use of e-learning so very few learners benefited especially children from rich families who could afford smartphones and internet bundles (Participant FGD2:P12).*

In corroboration, another informant remarked:

*Learners in the rural areas do not have smartphones and the data bundle is expensive so most learners could not receive information through e-learning. Teachers, student teachers, parents and learners needed to be workshopped on how to use e-learning because e-learning was a failure in Zimbabwe (Participant FGD3:P15).*

The above extracts are an indication that e-learning was very effective in controlling the spread of the COVID-19 virus. Learners did not have to come to school but learned in the comfort of their homes and there was no need for bus fares. However, the majority of the participants revealed that e-learning had a lot of challenges. Some of the challenges highlighted included a lack of electricity and internet connectivity in most schools. The student teachers did not know the use of e-learning for teaching. Most of the learners could not afford to buy smartphones and data bundles. Throughout the COVID-19 era, Zimbabwe experienced prolonged hours of power cuts so it was virtually impossible to use e-learning as a result no learning took place, and a lot of learning time was wasted. Most of the participants revealed that practical subjects like Physical Education and Visual and Performing Arts could not be done through e-learning as the student teachers and the learners had no knowledge of using e-learning platforms such as Google Class or Zoom. The results revealed that due to a plethora of challenges bedeviling the use of e-learning, most learners could not continue with their education due to school closures triggered by COVID-19 pandemic. Most participants felt that for e-learning to be a success, the government should electrify all schools, donate tablets to learners, provide free WIFI, and conduct workshops for teachers, student teachers and parents on the use of e-learning platforms. Participants also suggested that teachers' colleges should thoroughly train student teachers on the use of e-learning platforms such as Google Class for teaching before student teachers go on teaching practice. The findings revealed that student teachers found it very difficult to teach using e-learning during school closures which caused a lot of stress on their part.

#### **4.3.5 Sub-theme 1.4 Effects of lockdowns and school closures**

During focus group discussions and semi-structured interviews, participants expressed their views on the effects of national lockdowns and school closures on teaching practice. The results revealed that all the student teachers' mentors and the student teachers were of the opinion that teaching practice was negatively affected by lockdowns and school closures. Due to the lockdowns and the school closures, the teaching practice period was extended by another term so the student teachers were made to pay fees for the extra term. Due to the prolonged teaching practice period, a few student teachers dropped out and some of the female student teachers fell pregnant. Teaching practice allowances were ceased so the student teachers faced a lot of financial problems and could not buy food, clothing, stationery, masks and sanitizers to protect themselves against COVID-19. While in college the student teachers were not trained to use e-

learning so teaching practice did not progress during school closure since student teachers lacked knowledge on e-learning and also could not afford to buy smartphones and data bundles. Teaching practice supervision came to a halt during school closures because college lecturers could not supervise student teachers doing face-to-face teaching. The college had no capacity to use e-learning to supervise student teachers on teaching practice because the college did not have ICT gadgets and WIFI. The college lecturers did not have the knowledge of how to supervise student teachers online. The following extracts can help illustrate the views of the participants on the effects of lockdowns and school closures on teaching practice.

During the interview session, one of the student teachers had this to say:

*The college lecturers had to send notes through Google class and WhatsApp but due to lack of knowledge of Information and Communication Technology, I ignored the notes. Teaching practice did not progress through e-learning but we waited for schools to be reopened. Staying at home was stressful because our teaching practice was stagnant. Lockdown affected syllabus coverage and I had to re-scheme because the terms lapsed before covering the schemed concepts. There was work over load as we were expected to cover the syllabus within a very short space of time after school reopened (Participant STIN: R02).*

Furthermore, another student teacher remarked:

*Government ceased T.P allowances because our teaching practice contract had expired. Charts were destroyed by vandals during lockdowns so I had to buy manila and make new charts. I got stressed because I had lost hope of completing T.P due to the COVID-19 situation (Participant STIN: R09).*

In addition, another informant postulated:

*T.P did not progress during the lockdowns because the schools were close and as a result T. P period was extended. Due to the expiry of our T.P contract, the government ceased our allowances. School closures extended the T.P period so we not able to complete T.P. in 3 terms. We were made to pay fees for 4 terms instead of 3 terms (Participant STIN: R10).*

In corroboration another student teacher said:

*The T.P. period was extended and I experienced many drawbacks. I paid T.P. fees for five terms instead of three terms. The teaching practice period was prolonged and extended, I almost dropped out due to lack of money to pay the teaching practice fees for the extra term (Participant STIN: R04).*

All the student teachers' mentors felt that teaching practice was severely affected by the national lockdowns and school closures. During the interview sessions, one of the student teachers' mentors had this to say:

*Some student teachers did not have money to buy smartphones so T.P did not progress during the lockdowns. The student teachers need to buy food and pay fees. The T.P. period was extended by one term so instead of 3 terms T.P. they covered 4 terms. Their T.P. allowances were ceased in their 3<sup>rd</sup> term so they went on T.P. for a term without allowances (Participant SMIN: R01).*

In addition, another student teachers' mentor said:

*The T.P period was extended because student teachers could not practice teaching as schools were closed. Due to lockdowns, there was loss of income; the government ceased the TP allowance for student teachers. The school administration bought sanitizers and masks for teachers and the learners however, they were inadequate. Only paid-up learners were given masks, as most parents did not afford to buy masks for their children due to loss of income because of COVID-19 (Participant SMIN: R02).*

Furthermore, another student teacher's mentor posited that:

*During school closures student teachers did not manage to continue with T. P. since schools were closed. Their TP period was stretched which caused anxiety, and some of them dropped out while others failed to get fees for the extended term. Allowances were ceased by the government due to the extension of the TP period. (Participant SMIN: R03).*

During focus group discussion sessions, the majority of the student expressed their views on the effects of lockdowns and school closures as follows:

*T. P. did not progress through e-learning and because schools were closed there were no means of supervising student teachers. In addition, student teachers were not able to teach using e-learning (Participant SMIN: R04).*

*Due to COVID-19 induced lockdowns and school closures learners forget learnt concepts so that mentors had to resort to teaching previously taught learners and student teachers failed to cover the topics schemed for the term (Participant FGD1:P03).*

Pertaining to the effects of school closures on teaching practice supervision, one of the student teachers' mentors reiterated that:

*It was difficult for lecturers to come and supervise students or to use e learning to supervise students so teaching practice was at a standstill. Student teachers completed T. P. half-baked (Participant SMIN: R05).*

In addition, another student teacher's mentor said:

*T. P. did not progress since learners were at home and also the college failed to supervise the student teachers due to the lockdown. T. P. was on halt and the T. P. period was prolonged (Participant SMIN: R06).*

In corroboration one of the student teachers in an interview session posted:

*T.P did not progress during the lockdowns because the schools were closed and as a result T. P period was extended. College lecturers failed to supervise us during school closures because supervision should be done during live lesson presentation. We could not complete teaching practice because we were under supervised. The college lecturers failed to supervise use using e-learning (Participant STIN: R10).*

The above extract revealed that teaching practice supervision was crippled by school closures. College lecturers could not supervise live lessons as the schools were closed. To make matters worse the college lecturers could not use e-learning to supervise student teachers due to lack of knowledge, ICT gadgets and WIFI.

School closures due to the outbreak of COVID-19 pandemic affected the student teachers on teaching practice psychologically, economically and socially. Most of the student teachers expressed their opinions as follows:

*Due to COVID-19 induced school closures, I lacked interest in my studies due to prolonged teaching practice period. Quite a number of female student teachers fell pregnant and deferred the course. On the other hand, a few male student teachers dropped out due to financial constraints (Participant STIN: R06).*

Another participant added this:

*A number of male student teachers dropped out of the college during the lockdowns due to lose of income by the bread winners (Participant FGD2:P14).*

Another informant explained that:

*Student teachers deferred because guardians could not pay fees as they lost jobs or died due to COVID-19 because COVID-19 affected the aged mostly. (Participant FGD1:P04).*

The above extracts revealed that school closures affected student teachers on teaching practice economically, socially and psychologically. A few student teachers either dropped out or deferred due to financial or social problems. Financial constraints were exacerbated by the death of some breadwinners or job loss caused by COVID-19 lockdowns.

The views emerging from the focus group discussions and the semi-structured interview seem to confirm that national lockdowns and school closures negatively affected teaching practice progression. Results show that teaching practice came to a halt due to lockdowns and school closures because live lessons could not be executed while learners were at home. Student teachers failed to complete teaching practice due to under supervision since lecturers failed to adequately supervise the student teachers when schools were closed and face-to-face teaching transferred to e-learning. Due to a lack of knowledge of e-learning and a lack of ICT gadgets teaching practice supervision online was impossible. Some of the students either dropped, or deferred due to financial challenges or pregnancy or lack of interest to continue with teaching practice. To cover up for the teaching practice lost time, teaching practice was extended by a term resulting in the cessation of teaching practice allowances further compounding the financial

challenges of the student teachers. The results of the study showed that teaching practice was negatively affected by the national lockdowns and school closures.

#### **4.3.6 Sub-theme 1.5 State of preparedness for schools re-opening**

The majority of student teachers and student teachers' mentors who took part in this research study explained their view on the state of schools for schools re-opening after the national lockdowns. Results of the study showed that most of the schools were not prepared for re-opening for various reasons. One of the major challenges which led to the ill-preparedness for re-opening was the lack of finance to purchase masks, sanitizers, thermometers, fumigation chemicals, and new furniture to enhance social distancing or build new classrooms. Most parents failed to pay school fees due to poverty and joblessness caused by the COVID-19 pandemic. Some parents did not want to pay school fees as they were uncertain of the COVID-19 situation so they thought the schools could be closed after they had paid the school fees. Most of the qualified teachers, student teachers and learners lacked knowledge of how to observe COVID-19 regulations, however, a few participants highlighted that some teachers were workshopped on how to protect themselves against COVID-19. Data revealed that most qualified teachers did not report for duty when schools re-opened because they were not vaccinated leaving student teachers to teach the large classes on their own exposing them to the risk of contracting the COVID-19 pandemic. The following verbatim quotes can help illustrate the views of the participants on the state of preparedness by the school for re-opening after the lifting of the national lockdown.

In an interview one of the student teachers echoed that:

*Our school was not adequately prepared for re-opening since there were no masks for learners and only learners who had fully paid up their fees were given masks. Learners who did not have masks were send back home so we had problems updating our records. I bought masks for my learners with the little money I had because I did not want them to be sent back home to collect masks (Participant STIN: R07).*

Another informant expressed her sentiments as follows:

*Our school was not adequately prepared for re-opening since there were no masks for learners and only learners who had fully paid up their fees were given masks. Learners*

*who did not have masks were send back home so we had problems updating our records. I bought masks for my learners with the little money I had because I did not want them to be sent back home to collect masks (Participant STIN: R04).*

In agreement another student teacher remarked:

*Our school was not adequately prepared for re-opening since there were no masks for learners and only learners who had fully paid up their fees were given masks. Learners who did not have masks were send back home so we had problems updating our records. I bought masks for my learners with the little money I had because I did not want them to be sent back home to collect masks (Participant STIN: R02).*

In view of the above quotations, results seem to point to the fact that most schools were not prepared for re-opening after the national lockdown was lifted.

During an interview session, one of the student teachers' mentors said:

*The school bought masks and sanitizers for staff members and paid-up learners. Learners who had not paid-up school fees were not given masks so they were send back home. Student teachers were not given masks and sanitizers. Due to loss of income caused by COVID-19, most parents could not afford to pay school fees for their children so our school was ill prepared for re-opening (Participant SMIN: R02).*

Responding to the same question, another student teacher's mentor had this to say:

*Non-payment of fees by parents due to loss of income caused schools not to be able to buy masks and sanitizers in preparation for re-opening of schools. The school had inadequate furniture and classrooms to maintain social distancing due to big enrolment of learners. Correct wearing of masks was a challenge to learners but student teachers kept on reminding them to mask up properly (Participant SMIN: R05).*

In contrast of the above sentiments one of the student teachers' mentors stated:

*Our school was prepared as teachers were workshopped by the government on how to protect themselves and the learners against COVID-19. The government provided sanitizers, masks and a detergent for fumigation called hydrogen peroxide however they*

*were not enough for the whole term. The school bought additional furniture to enhance social distancing. A few teachers were workshopped on ways of preventing the spread of COVID-19 (Participant SMIN: R06).*

Emerging from the three responses from student teachers' mentors during interview sessions are the views that most schools were not prepared for re-opening while very few schools were prepared for re-opening. Most schools had no money to buy masks and sanitizers since most parents had lost their jobs due to COVID-19, however, some parents were reluctant to pay school fees as they were afraid that the schools may close. Learners who had not paid fees were not given masks so they were sent back home. In most schools the masks and sanitizers were not adequate to cover the whole term. Most teachers and the learners did not know the correct ways of masking up.

Another student teacher elaborated on the subject of schools' preparedness for re-opening during a focus group discussion as follows:

*The schools were not ready for re-opening since, at opening, there were no masks and sanitizers for teachers, student teachers and the learners. There were no health officials in schools, so it was the duty of student teachers to sanitize learners at the main gate. This caused a lot of pressure on us as we delayed starting to teach the morning lessons. Most of time was spent at the sanitization point so it was difficult to update our records. Most of learners contracted the COVID-19 virus and were always absent from school which made it difficult of us to update our records especially the reading record book and the progress record book (Participant FGD2:P10).*

Another student teacher opined that:

*Most qualified teachers did not report for duty when schools re-opened due to fear of contracting the COVID-19 pathogen and only come for work after the government threatened to cease their salaries. There was not enough furniture to cater for social distancing and no new classroom blocks were built. Fumigation of classrooms was irregular as it was done only once per term (Participant FGD2:P11).*

In corroboration, another student teacher remarked:

*Only learners who had paid up their school fees were given only one mask per term and some resorted to picking up used masks and use them while others absented themselves from school due to lack of masks. The qualified teachers did not report for duty when schools re-opened leaving the student teachers to work on their own risking contracting COVID-19 and also work overload. This shows that our school was not prepared for re-opening (Participant FGD3:P19).*

The above responses from the student teachers' mentors and the student teachers who participated in this study seem to concur that most schools with the exception of very few schools were not prepared for re-opening. In most schools, there was a critical shortage of sanitizers, masks, thermometers, fumigation chemicals, furniture and classrooms. On schools re-opening most, qualified teachers did not report for duty because they were not vaccinated leaving the student teachers with the burden of teaching large classes at the same time enforcing the COVID-19 regulations. Most of the teachers and student teachers were not workshopped on how to protect themselves and the learners against COVID-19. This state of unpreparedness for reopening caused a lot of stress to student teachers on teaching practice in the COVID-19 era.

#### **4.3.7 Discussion of findings of Theme 1**

Data generated through focused group discussions and semi-structures interviews established that COVID-19 impacted negatively on teaching practice, there were several risks associated with being on teaching practice in COVID-19 era, COVID-19 influenced the teaching methodologies to be used, face-to-face- teaching was transferred to e-learning, national lockdowns and school closures negatively affected teaching practice, and most schools were not adequately prepared for schools re-opening.

##### **4.3.7.1 Impact of COVID-19 on teaching practice span.**

The model of teaching practice varies according to national and institutional prescription. It emerged from the focus group discussions and the semi-structured interviews that student teachers were on teaching practice for an extended period. The primary school teacher education programme in Zimbabwe follows a 3.3.3 model of training where student teachers spend three terms on teaching practice (Rembe, 2016; Chivore, *et al.*, 2015; Mavhundutse, *et al.*, 2014). Implicitly, under normal circumstances, student teachers are required to be on teaching practice for three terms which is one year. Most participants in this study reported that the student

teachers were on teaching practice for four terms instead of the stipulated three terms. Due to the national lockdowns and the resultant school closures induced by the COVID-19 pandemic, the teaching practice period was prolonged by another term. The research findings contradict the following statement by Mavundutse, *et al.*, (2014) who posit that to achieve the standard required for qualified teachers in Zimbabwe, student teachers are required to do Teaching Practice for three terms. A comparative study on teacher education by Yadav (2011) in Pakistan, India, Bangladesh and Sri Lanka revealed that the duration and organization of teaching practice varied from country to country (Rembe, 2016), however in this case the variation from the stipulated teaching practice span was due to school closures caused by the need to curb the spread of the COVID-19 pandemic.

A review of related literature shows that towards the end of the teaching practice period, that is three terms, the student teachers are externally examined by the external assessors from the Department of Teacher Education, University of Zimbabwe (Chivore, *et al.*, 2015). Findings from the focus group discussions and the interviews revealed that all the student teachers were not able to complete teaching practice because they were under-supervised by internal assessors, and were not externally examined by external assessors from the University of Zimbabwe. Data revealed that due to school closures caused by the COVID-19 pandemic, external assessors could not examine the student teachers. It emerged from this study that student teachers remained on teaching practice for an extended period of time. External examining is mandatory in all teachers' colleges under the University of Zimbabwe Scheme of Association, so in line with this requirement, student teachers could not complete their teaching practice. Student teachers are externally examined through critical analysis of their teaching practice records and live lesson execution based on the Department of Teacher Education's established criteria for the supervision of practical teaching (Chivore, *et al.*, 2015). The preceding study has established that the teaching practice span was prolonged due to school closures caused by the COVID-19 pandemic.

#### **4.3.7.2 Risks associated with COVID-19 on student teachers on teaching practice.**

The research findings confirm findings from the World Health Organization, (2020) report which revealed that student teachers on teaching practice are exposed to dangers which include pathogen exposure, long working hours, psychological distress, fatigue, burnout, and stigma. It

emerged from this study that student teachers were afraid to contract the COVID-19 virus and also spread it to their family members. Participants revealed that they feared death or being quarantined after contracting the pathogen which caused a lot of stress and anxiety. This view is also corroborated by other scholars (Patrick, Henkhaws, Zickafoose, Lovell, Halvorson, Loch, Letterie and Davies, 2020) who pointed out that for student teachers on teaching practice, the perception of being infected with the coronavirus from the learning environment threatens not only their psychological wellbeing but also their physical, intellectual, emotional and occupational wellbeing.

Findings from this study concur with White and Mc Sharry (2021) who pointed out that feelings of isolation and detachment experienced by student teachers as a result of the removal of human contact and support plunged the student teachers into a state of heightened liminality. Data revealed that most student teachers who contracted the COVID-19 virus were quarantined in COVID-19 clinics or at home so they felt isolated. Participants also explained that even after the quarantine the COVID-19 sufferers were isolated and stigmatized at their practicing schools causing depression due to loneliness. Garmerzy (1991) validated this finding and stated that risk factors appear to have a cumulative effect, reducing qualities of engagement and enhancing disruptiveness. This study's findings are consistent with COVID-19 related studies that have also shown that student teachers' levels of stress, anxiety, and depression worsened compared to that before the COVID-19 pandemic (Elmer, Mepham, Stadtfield and Caprano, 2020). It emerged from the findings of this study that the government ceased the teaching practice allowances of the student teachers because their contract had expired after three terms but due to school closures, student teachers were on teaching practice for four terms. Additionally, the findings of this study allude to similar views as those by Cao *et al.* (2020) who reported that student teachers had worried over the economic impact and deferments in academic activities due to school closures as a measure to combat the COVID-19 pandemic.

The results from the current study corroborate the survey by UNESCO (2020) which reported that in Ghana, like other developing countries, the teaching-learning environment amidst COVID-19 is further compounded by a lack of adequate personal protective equipment (PPEs), teaching and learning materials and infrastructure, facilities, technical equipment and other logistical support so the psychological pressure and burden could be enormous for both lecturers

and student teachers in the light of the ongoing pandemic and context-specific inadequacies (Pragholapati, 2020). It emerged from this study that there was a serious shortage of personal protective clothing. Findings revealed that masks, sanitizers and fumigation chemicals were in short supply. Participants further explained that some learners came to school without masks while most teachers and learners had no knowledge of how to mask up correctly and to maintain physical social distancing. Findings showed that in most schools there was only one point for hand washing and testing of temperature, however, only student teachers were assigned to make sure learners washed their hands and to test temperature which exposed them to the COVID-19 virus and also caused overworking and work overload. Data from the focus group discussion and semi-structured interviews were in accordance with UNESCO (2020) report as it revealed that most learners did not have masks, sanitizers and fumigation chemicals in short supply so the virus could easily spread. Furthermore, the study also revealed that most classrooms were crowded due to a very high pupil-teacher ratio so it was difficult to maintain physical social distancing in the classrooms putting the student teachers, students' mentors and learners at a very high risk of contracting the COVID-19 virus.

Research findings concur with several studies which reported that the COVID-19 pandemic has triggered an increase in fears of COVID-19 that contribute to growing levels of stress, anxiety and depression (Valero, 2020; Pieh, *et al* 2020; Wang and Zhao, 2020) and traumatic stress (Huremovic, 2019; Ramirez-Ortiz, 2020; Sun,2021). The participants in this study reported that they were highly stressed and anxious due to the prevalence of the COVID-19 pandemic as the number of positive cases and deaths kept on rising in the country. Furthermore, the findings of this study are commensurate with Sher (2020) who opined that the COVID-19 pandemic has been associated with distress, fear of infection, depression and insomnia both in lecturers and student teachers who may experience increased levels of stress associated with increased suicidal behaviour. Results showed that most participants lived in fear of contracting the virus, getting sick, dying and even spreading the virus to their family members back home. The participants' views corroborate those of Koerner (2020) who alludes that while student teachers were worried about their learners' well-being during the COVID-19 pandemic, they were also worried about their own families and even their health.

The findings from this study contradict a study by Mavundutse (2004) which revealed four main sources of stress among student teachers; Theory of Education assignments, examinations, work load and being non-resident. Most of the participants in this study worried about the risk of contracting COVID-19, getting sick, dying, stigmatization and spreading the virus to their family members. Furthermore, the results of this study partially concur with Nyabadza and Mutendera (2014) who examined some forms of stress among female student teachers and reported the common forms of stress to be: inadequate support from home, ineffective mentorship, high college expectations and harassment by lectures, however, these results did not include stressors induced by the COVID-19 pandemic. Findings revealed that mentors were not friendly, disrespectful and rude to student teachers and also college lecturers expected student teachers to perform highly something which was difficult due COVID-19 protocols.

#### **4.3.7.3 Pedagogy during COVID-19 pandemic**

The results from this study concur with Kosar (2021) who indicated that until the outbreak of the COVID-19 pandemic, student teachers were placed in teaching practice schools where they were required to teach learners and witness their mentor teachers' instructional practices. It emerged from this study that before school closures at the onset of the spread of COVID-19 child-centred methodologies such as group work, experimentation and field trips were banned. Results further revealed that the lecture method and the Socratic method were preferred as they did not promote the spread of COVID-19 virus. Participants in this study felt that the lecture method was not effective in teaching primary school learners as it did not promote active participation. Data showed that due to the increase in COVID-19 cases nationwide, schools were closed as a measure to curb the spread of the COVID-19 pandemic. The study findings are consistent with views by other scholars (UNESCO, 2020; Capone, Caso, Donizzetti and Procentese, 2020) who point out that the major impact of COVID-19 restrictions was the closure of schools, postponement or cancellation of all campus-related academic and social activities disrupting over 1.2 billion students' academic pursuits worldwide. This view is corroborated by Kosar (2021) who opined that as a result of school closures due to COVID-19 student teachers could not complete their teaching practice in their placement schools.

The findings of this study are inconsistent with a study by Meaghan (2021) which established that with the onset of COVID-19, student teachers had to immediately switch their instruction to

an online format in the snap of a finger. It emerged from the findings of this study that most of the student teachers lacked knowledge on the use of e-learning platforms for teaching and they were not even aware of these online platforms. Data showed that the student teachers were not trained to use e-learning platforms at college. Findings revealed that a few student teachers tried to use WhatsApp for teaching but it failed as the learners lacked access to smartphones and could not afford the expensive data bundles. In line with the above revelations Nasr's (2020) study reported that some student teachers were already comfortable with the use of technology, while others rarely used online teaching tools to direct student learning in the traditional face-to-face classroom. Contrary to Nasr's (2020) report, it emerged from this study that student teachers were abruptly expected to use online learning platforms such as Google Class, and Microsoft Teams, which they had no knowledge of and to make matters worse the learners could not access compatible gadgets, lack of electricity and expensive bundles made it difficult to use e-learning in the rural schools.

The unprecedented shift from face-to-face teaching to online teaching posed new challenges that included the development of alternate instructional delivery models and self-directed management of the studies for student teachers and learners with widespread uncertainty, anxiety and panic (Capone, Caso, Donizzetti and Procentese, 2020). Findings from this study revealed that most student teachers lacked technological pedagogical content knowledge and as a result, they experienced technological shock, frustration and anxiety. It emerged that both student teachers and the learners did not have access to compatible gadgets such as laptops and smartphones, most schools were not electrified, there was no WIFI connectivity and data bundles were out of reach for many so it was almost impossible to implement online education during COVID-19 pandemic. UNESCO (2020) reported that the closure of schools has accelerated an abrupt entry into a new era of learning, that is, the demand for almost immediate digital transformation of learning not only requires the incorporation of technologies but also requires the creation or modification processes and abilities of people with the appropriate capacities and skills to develop said processes and technologies. Findings confirm findings from a study by Dalal., et al. (2021) which revealed that student teachers had difficulties adopting technology due to limited resources. Findings showed that due to a lack of knowledge on how to use technology for teaching and a lack of internet infrastructure teaching practice and learning ground to a halt causing panic, feelings of hopelessness and frustration on the part of student teachers.

The findings of this study are inconsistent with research findings from a 2022 study by Front Psychol, which showed that the level of Technological Pedagogical Content Knowledge and readiness of student teachers were high, especially for Technological knowledge, however, the same study revealed that Technological Pedagogical Content Knowledge should look into the online teaching readiness of student teachers so that they are well equipped with the online pedagogical knowledge for effective teaching and learning. It emerged from this study that most of the student teachers lacked both technological knowledge and technological pedagogical content knowledge as the student teachers were not taught to use them while in college. Most participants revealed that while at college, they were taught basic Information and Communication Technology (ICT) skills like typing, attaching a document, researching and sending documents and nothing to do with technological pedagogical content knowledge. Data revealed that while in college the student teachers failed to do much practical in ICT due to constant power cuts. It emerged from this study that though e-learning was safe to use during the COVID-19 pandemic, the student teachers lacked both Technological knowledge and Technological Pedagogical Content Knowledge. The current study's findings resonate with UNESCO's (2020) report which reported that online education lacks quality because teachers are unprepared for online pedagogical knowledge. The participants in this study felt that the teacher education programme should thoroughly prepare student teachers to use e-learning platforms for teaching and learning.

#### **4.3.7.4 Effects of school closures on teaching practice**

Data are consistent with Ferreyra (2017) who posits that the disruption of learning may exacerbate student teachers' fragile condition and force them to drop out, thereby yet again, perpetuating a situation of exclusion because of the inequality that is characteristic of the higher education system. It emerged from this study that due to the lockdowns and the school closures, the teaching practice period was extended by another term so the student teachers were made to pay fees for the extra term, a few student teachers dropped out and some of the female student teachers fell pregnant. Furthermore, participants revealed that Teaching practice allowances were ceased by the government so the student teachers faced a lot of financial problems and could not buy food, clothing, stationery, masks and sanitizers to protect themselves against COVID-19. In this study, it has been established that while in college the student teachers were not trained to

use e-learning so teaching practice did not progress during school closure since student teachers lacked knowledge of e-learning and also could not afford to buy smartphones and data bundles.

The findings from this study corroborate those by Konyana and Motalenyane(2022) who claimed that college lecturers and external assessors from the University of Zimbabwe have to visit the student teachers in their practicing schools to supervise and examine the student teachers' overall teaching practice performance for a student teacher to complete teaching practice. In this study, it has been established that Teaching practice supervision came to a halt during school closures because college lectures could not supervise student teachers doing face-to-face teaching. Participants revealed that the college had no capacity to use e-learning to supervise student teachers on teaching practice because the college did not have ICT gadgets and WIFI and also college lecturers did not have the knowledge on how to supervise student teachers online, that is, virtual teaching practice supervision.

Chivore, *et al.*, (2015) pointed out that towards the end of the teaching practice period, the student teachers are externally examined by the external assessors from the Department of Teacher Education, University of Zimbabwe teaching the learners. It emerged from this study that teaching practice external examining was not carried out as it was supposed to be done, that is, face-to-face. The study further indicated that the Department of Teacher Education had no capacity to carry out virtual teaching practice external examining so the student teachers could not complete teaching practice within the three terms regulation time.

#### **4.3.7.5 State of preparedness for re-opening.**

The results from this study concur with a survey by The Zimbabwe Human Rights Commission (ZHRC) (2020) which reported that most educators were not aware of the preparatory measures which needed to be put in place ahead of re-opening schools, the time frame, actual dates of re-opening, and lacked information regarding the testing of staff and the learners. Findings revealed that most educators and student teachers had no idea of enforcing the COVID-19 protocols put in place to curb the spread of COVID-19 and there was conflicting information regarding the opening dates and modalities for re-opening. It emerged from the study that due to a lack of finances there was a shortage of masks, sanitizers, fumigation chemicals, furniture and classrooms to facilitate compliance with COVID-19 protocols. Their views corroborate those of

a research study by ADEA, AU/CIEFFA, and APHRC (2021) which revealed that in terms of finance for the re-opening of schools during the COVID-19 pandemic, most African countries had inadequate internal funding to facilitate compliance with the World Health Organization protocols. Elaborating on the above findings (ZHRC, 2020) revealed that most schools did not have enough finances to put in place precautionary measures against COVID-19 before schools opened.

The findings of this study are consistent with a survey carried out by ADEA, AU/CIEFFA, and APHRC (2021) which showed that pre-existing challenges with infrastructure were other challenges, especially in schools that are already overcrowded, for example, Ghana, Nigeria and Rwanda, have average class sizes in primary school of 39, 51 and 43 respectively. It emerged from the findings that due to the high pupil-teacher ratio and the shortage of furniture and classrooms, it was difficult to maintain physical social distancing. Findings show that most of the participants were of the idea that the Ministry of Primary and Secondary Education should quickly replace student teachers' mentors who died due to COVID-19 or other natural cause to avoid work overload on the part of the student teacher. The above findings contradict a research study by Ezeonu, Uneke and Ezeonu (2021) who posit that China, Taiwan, South Korea, Norway, Denmark, Germany, Australia and Israel reduced class sizes, had adequate furniture and learning space, wearing masks was mandatory and a high standard of hand hygiene was ensured.

#### **4.4 Theme 2: Factors that hinder resilience of student teachers on teaching practice in the COVID-19 era.**

Theme 2 captures the views of the participants on the factors that hinder resilience of student teachers on teaching practice in the COVID-19 era. During focus group discussions and semi-structures interviews, participants expressed their views on factors that hinder resilience of student teachers on teaching practice during COVID-19 pandemic. It emerged that a number of factors hindered the resilience of student teachers on teaching practice in COVID-19 era. The researcher categorized data into four sub-themes namely; (2.1) student teachers' teaching competencies; (2.2) poor relationships; (2.3) threats to student teacher resilience; and (2.4) teaching practice supervision.

Table 4.4.1 gives an overview of Theme 2 and its sub-themes.

<b>THEME 2</b>			
Factors that hinder resilience of student teachers on teaching practice in the COVID-19 era.			
<b>Sub-theme 2.1</b> Student teachers’ teaching competences	<b>Sub-theme 2.2</b> Poor relationships	<b>Sub-theme 2.3</b> Threats to student teacher resilience <b>Categories</b> 2.3.1 Behavior problems 2.3.2 adjustments to class and classroom organisation 2.3.3 work overload	<b>Sub-theme 2.4</b> Teaching Practice supervision <b>Categories</b> 2.4.1 Teaching practice supervision in COVID-19 era. 2.4.2 alternative ways to face-to-face teaching practice supervision

During focus group discussions and semi-structured interviews, participants aired out their views on factors that hinder the resilience of student teachers on teaching practice in COVID-19 era. Sub-themes such as student teachers’ teaching competencies, poor relationships, threats to student teacher resilience and teaching practice supervision in COVID-19 era emanated from the main theme. The four sub-themes and their categories listed above were explored.

#### **4.4.1 Sub-theme 2.1: Student teachers’ teaching competencies**

In this section, the researcher reports on the participants’ views on student teachers’ teaching competencies in COVID-19 era. The student teachers’ mentors and the student teachers who participated in this study echoed their sentiments on the student teachers’ teaching competencies and how they influenced the resilience of student teachers on teaching practice in COVID-19 era. Results from the study revealed that student teachers lacked teaching competencies when they started their teaching practice. Most of the participants felt that the college did not develop the student teachers’ teaching competencies prior to teaching practice. All the student teachers highlighted that they spend only two terms instead of three terms in college due to early closures

induced by COVID-19. Their third term was covered through e-learning which was ineffective so they were not adequately prepared for teaching practice. The verbatim quotes below can help illustrate the views of the participants on the teaching competencies of student teachers.

One of the participants postulated that:

*I lacked confidence at first due to my poor health and the first day I was supposed to teach, I collapsed in front of learners. I was scared to teach, that in security crashed my confidence since I had little knowledge on how to teach from the college. Stress was caused by lack of teaching techniques and lack of knowledge on record keeping. I did not know how to scheme, plan and manipulate all other class records, at first it was very difficult (Participant STIN: R03).*

One of the participants said in an interview:

*I was afraid to stand in front of learners teaching because we were not fully prepared by the college to teach. It was my first time to scheme so I found it difficult to scheme and I lacked content knowledge for subject like VPA and FAREME. Due to COVID-19 I lacked confidence because of fear of contracting the COVID-19 virus. In addition, I had no experience in teaching so that made me jittery in front of the learners (Participant STIN: R04).*

In corroboration, one of the student teachers remarked:

*I lacked confidence to teach because the college had not adequately prepared us to teach due to early closure caused by COVID-19. I was nervous to stand in front of learners in the presents of the mentor teaching since I was not sure of how to teach the learners (Participant STIN: R09).*

Emerging from the three responses from the student teachers is the view that student teachers lacked the necessary teaching competencies which caused a lack of confidence on the part of the student teachers. The findings seem to suggest that lack of confidence hindered the resilience of student teachers on teaching practice in COVID-19 era.

In support of the above view, one of the student teachers' mentors, during an interview, remarked:

*During their first term on T.P, student teachers at times failed to speak in front of learners. Student teachers were not adequately prepared to teach, plan and scheme so they suffered from anxiety due to lack of confidence and fear of contracting COVID-19 and fear of being supervised. Student teachers suffered from stress due to financial problems because they could not buy charts, stationery and materials to make media (Participant SMIN: R01).*

Another informant explained that:

*Student teachers were not well versed in planning scheming and lesson presentation; they also lacked teaching skills and confidence. Student teachers were afraid of COVID-19 and as mentor; I did not effectively assist the student teachers due top fear of contracting COVID-19 virus. Student teachers had problems using safe methods which did not spread COVID-19 because they were not prepared by the college to use safe methods that did not spread COVID-19(Participant SMIN: R03).*

In corroboration, another student teacher's mentor postulated that:

*Student teachers were not fully equipped to teach; lacked knowledge on scheming, planning and lesson presentation so they lacked confidence. Student teachers were also afraid of COVID-19 so they were not confident to teach. Lack of subject content caused lack of confidence since the government introduced the New Curriculum with new subjects like VPA and FAREME. Student teachers need time to read from the textbooks or internet to understand the subject content (Participant SMIN: R05).*

The majority of the participants were in agreement that student teachers lacked the basic teaching competencies of scheming, planning, lesson execution and record construction and keeping. The student teachers were not fully prepared for teaching practice during their first residential phase in college. Most of the student teachers' mentors observed that the teaching competencies gradually developed with experience however the development was hindered by COVID-19. The majority of the student teachers lacked content knowledge of the newly introduced subjects of

the curriculum which was another hindrance to the resilience of student teachers on teaching practice in the COVID-19 era. Fear of contracting the COVID-19 virus and lack of teaching skills caused a lot of stress and a lack of confidence in student teachers. The sentiments above seem to suggest that a lack of teaching competencies hindered the resilience of student teachers in the COVID-19 era.

#### **4.4.2 Sub-theme 2.2: Poor relationships**

The participants in this study revealed that there were cases of poor relationships prevailing between the student teachers on teaching practice and various stakeholders. Fewer cases of poor relationships existed between the student teachers and the school administration, student teachers and the student teachers' mentors, student teachers and college lecturers, student teachers and the learners and also among the student teachers. Research findings seem to suggest that these poor relationships between the student teachers and the various stakeholders were a threat to the resilience of student teachers on teaching practice in the COVID-19 era. The following extracts can help illustrate the different forms of poor relationships and their effects on the resilience of student teachers.

In an interview, one of the informants had this to say:

*The deputy head had a negative attitude towards me and she disrupted my teaching by taking learners outside for gardening. This caused a lot of stress on me and learning was disturbed. One of our fellow student teachers got favors from the Deputy Head and the other student teachers were discriminated against. (Participant STIN: R01).*

Another participant echoed that:

*At first, my relationship with the school administration was rocky since I was looked down upon and asked to carry out all the dirty duties at school like supervising learners cleaning the toilets and schoolyard. They did not respect student teachers as part of the teaching staff (Participant STIN: R03).*

One of the student teachers' mentors, in an interview, said:

*Due to poor relationships with the school administration, the working environment was not conducive because the student teacher was not free to ask for help from the*

*administration and the administration was not be eager to assist the student teachers. (Participant SMIN: R01).*

During a focus group session, one of the student teachers postulated that:

*The school head looked down upon student teachers, she called us names and asked us to do dirty work for example sanitizing learners and managing the cleaning of toilets at school. The relationship was sour. I suffered from flue but the school head shouted at me in front of the learners instructing me to go to the clinic and get tested for COVID-19, I felt humiliated. (Participant FGD2:P10).*

In corroboration, another student teacher remarked:

*Student teachers were given dirty duties, for example, supervising the cleaning of toilets, picking of papers, sanitizing learners and fetching water with learners, cooking for visitors. School administration failed to upgrade the ECD centre for us and I ended up paying a local builder to do the job so I used my meager allowances resulting in financial difficulties. (Participant FGD1:P02).*

One of the student teachers' mentors remarked:

*Poor relationships with admin will affect teaching. Admin has to be fatherly and do guidance and counseling but due to poor relationships, this will not be possible. The student will lack confidence and think of transferring from the school (Participant SMIN: R05).*

In view of the above quotations, it is clear that poor relationships between the student teachers and the school administration had negative effects on the psychological well-being of student teachers on teaching practice in COVID-19 era. As a result of poor relationships, the student teachers felt degraded, humiliated, dehumanized and lacked professional and social support from the school administration, a situation which hindered their resilience on teaching practice. When responding to the same question during an interview session, one of the student teachers' mentors expressed his views as follows:

*Poor relationships between the mentor and the mentee resulted in the student teacher not getting help from the mentor on lesson presentation, planning and class control. The mentor and mentee would not be free to ask for help from each other or even talk to each other. The mentor will not teach or mark exercise books causing work overload on the mentee (Participant SMIN: R01).*

Another student teacher expressed her sentiments as follows:

*While trying to teach the mentor shouted me and asked me to stop teaching, this caused lack of confidence and lack of respect by learners. Learners could see that I was embarrassed and not confident (Participant STIN: R07).*

During a focus group session one of the informants had this to say:

*As for me it was tough as the mentor was always absent from school and allowed me to teach ICT, ChiShona and Family, Religion and Moral Education only. The relationship was poor as the mentor did not respect me and was harsh (Participant FGD2:P08).*

Another participant opined that:

*I had to transfer from my first practicing school because the mentor proposed me to fall in love with him and I refused so we became enemies. Mentors did not give me time to teach, disregarding lessons I planned so I just evaluated that the lessons were taught successfully although they were not taught. (Participant FGD3:P18).*

One of the student teacher's mentors opined that:

*When there are poor relationships between the mentor and the student teacher it will be a very big challenge because the mentor is the immediate supervisor. If the relationship is poor then the mentor will not assist the student teacher and the student teacher will find it difficult to ask for help (Participant SMIN: R04).*

The above responses from the participants seem to concur that poor relationships between the student teachers and the student teachers' mentors negatively affect the resilience of student teachers. Due to poor relationships, student teachers' mentors find it difficult to give professional and social support to student teachers. These poor relationships cause conflict and poor working

relationships which negatively affect the resilience of student teachers on teaching practice in COVID-19 era.

When responding to the same question on the effects of poor relationships on the resilience of student teachers on teaching practice in COVID-19 era, during the interview session voiced her sentiments as follows:

*Some student teachers report to the mentors or head what we will have discussed as student teachers and we were asked to report to the school head's office for disciplinary hearing. Student teachers spread rumors about fellow student teachers which caused conflict. Fellow students isolated me as they felt that I was proud and I felt out of place and we did not share ideas. There was no cooperation between us as student teachers and we always had conflicts. (Participant FGD1:P06).*

Another informant explained that:

*Some student teachers did not want to sanitize learners or perform duties given to student teachers leaving fellow student teachers doing the duties on their own. There was lack of cooperation among us student teachers (Participant FGD1:P09).*

Depicted in FGD1:P02's words,

*"Some student teachers related to college lecturers gossip with the lectures about fellow student teachers that cause lectures to have a negative attitude towards some student teachers and downgrade them. There was lack cooperation among student teachers especially on sanitizing learners at the main gate caused friction and quarrelling among us".*

In corroboration another student teacher remarked that:

*Student teachers related to the school administrators received some favors and those not related to school administrators were discriminated against and were assigned more duties. Some student teachers did not perform their duties especially sanitizing learners and testing temperature at the entrance gate causing quarrelling among student teachers. (Participant FGD2:P10).*

One of the participants opined that:

*Some student teachers did not want to sanitize learners or perform duties given to student teachers leaving fellow student teachers doing the duties on their own. There was lack of cooperation among us student teachers (Participant FGD1:P09).*

Furthermore, SMIN: R04 claimed that,

*“Due to conflict fellow student teachers were not be able to scaffold each other, they need to share ideas and help each other on planning, record keeping, and classroom management and on solving social problems so as to boost their resilience”.*

Given the above participants’ views, poor relationships among student teachers negatively affect their resilience on teaching practice in the COVID-19 era. Results show that in some cases student teachers had conflict with each other, lacked cooperation amongst themselves and spread rumors about fellow student teachers causing a lot of disharmony and friction. Lack of cooperation and hatred amongst student teachers hinder the resilience of student teachers on teaching practice in COVID-19 era.

When responding to the question on poor relationships between the student teachers and college lecturers, one student teacher, during an interview session voiced her sentiment as follows:

*Some college lecturers scolded student teachers in the presents of the mentor and learners causing lack of confidence, however other college lecturers were patient and gave constructive comments. (Participant FGD1:P03).*

One participant stated that:

*The lecturer who supervised me for the 3rd time was disrespectful and stopped my lesson presentation midway and took over the lesson presentation which embarrassed and stressed me. College lecturers come for teaching practice supervision without notice which caused a lot of anxiety and panic. One day college lecturers arrived at our school as early as 0630am and I was not prepared so I became very afraid as a result I forgot the media and the lesson steps; it was a horrible experience (Participant FGD3:P20).*

In an interview, one of the student teachers' mentors remarked:

*When there is bad blood between the lecturer and the student teacher; the lecturer downgrades the student teacher but the advantage is that a lecturer can only supervise a student only once for the whole of T. P. period. Lecturer rebuked the student teacher in front of the mentor and learners, which was dehumanizing (Participant SMIN: R05).*

Another student teacher postulated that:

*College lecturers come for teaching practice supervision without notice which caused a lot of anxiety and panic. One day college lecturers arrived at our school as early as 0630 and I was not prepared so I became very afraid as a result I forgot the media and the lesson steps. This caused a lot of stress on me and learning was disturbed. (Participant STIN: R01).*

In addition, another student teacher echoed her views as follows:

*The college lecturer refused to supervise my record books during first supervision since I had contracted COVID-19 that caused a lot of stress on me however, she advised me to score higher marks. Lecturers are there to give advice so the student teacher if relationships are sour, the student teacher finds it difficult to consult the lecturers on anything to do with teaching practice because of poor relationships (Participant STIN: R02).*

The point evolving from the above quotations is that poor relationships between the student teachers and the college lecturers pose a big threat to the resilience of student teachers on teaching practice. Results show that a few lectures were harsh, cruel, intolerant, disrespectful and shunned student teachers who once contracted the COVID-19 virus.

When responding to a question on the effects of poor relationships between student teachers and learners; one of the student teachers expressed her views as follows:

*One of the boys did not want to write and one day he stole a book and I reprimanded him he threatened me that I was going to be bewitched by his mother. He also threatened me with violence using catapult (Participant FGD2:P14).*

Depicted in STIN: R06's words:

*"There were poor relationships between learners and me due to absenteeism and disobedience as a result of staying home for a prolonged period due to lockdown. Bullying others by some learners and refusal to write school work caused poor relationships. One of the bullies threatened to report me to the police if I beat him however these were isolated cases".*

Another participant opined that:

*I had some learners whose parents were lecturers at our college, these children were disrespectful and stubborn and if I tried to caution then they reported me to their parents, i.e., the college lecturers, I reported the case to the mentor who disciplined the learners. (Participant FGD2:P10).*

The above quotations suggest that poor relationships between the student teachers and the learners, though few, harmed the resilience of student teachers on teaching practice. Results show that a few learners were disrespectful, stubborn, and violent and issued some threats to student teachers on teaching practice which hindered their resilience because student teachers felt threatened and vulnerable.

During a focus group discussion, one of the student teachers explained that:

*Parents did not cooperate with teachers and looked down upon teachers so even if we asked them to buy books for the learners, they didn't do so. I ended up buying exercise books, covers and pens for learners which was expensive for me (Participant FGD2:P09).*

One of the informants said the following:

*Parents from the community were not forthcoming so they refused to assist the children with homework and said that it was the duty of the student teacher to teach the learners. We wanted to cover the syllabus through homework since most of the learning time was lost due to COVID-19 but parents were not cooperative (Participant STIN: R10).*

Another participant opined that:

*My relationship with the community was fair since some parents attended parents' days and consultation days however a few parents did not value education of their children and refused even to buy exercise books and ball point pens for their children which made life difficult for me. (Participant FGD2:P11).*

In corroboration, another participant remarked:

*Some parents from the community looked down upon student teachers and called us names and refused to help their children with homework given to their children by student teachers saying that it was the job of the student teacher to teach the learners that is what they came from college for. (Participant FGD3:P20).*

From the above quotes, it is clear that some parents from the community were not cooperative, threatened them with violence and they looked down upon student teachers on teaching practice which resulted in poor relationships between the student teachers and some of the parents from the community. It seems the poor relationships stressed the student teachers hindering their resilience on teaching practice while on teaching practice in COVID-19 era.

#### **4.4.3 Sub-theme 2.3: Threats to student-teacher resilience**

In this segment, the researcher reports on the participants' views on threats to student-teacher resilience on teaching practice in COVID-19 era. The student teachers' mentors and the student teachers who participated in this study echoed their sentiments on challenges to student teacher resilience on teaching practice in COVID-19 era. Results from the study show that show that three categories of threats emerged from the study, namely learner misbehavior, class and classroom organization and work overload. Most of the participants felt that learner misbehavior, class and classroom organization to enhance social distancing and work overload caused by inconveniences induced by COVID-19 posed serious threats to resilience of student teachers on teaching practice in COVID-19 era. The extracts below can help illustrate the views of the participants on challenges to resilience of student teachers on teaching practice in COVID-19 era.

#### 4.4.3.1 Behaviour Problems

When responding to the question on effects of misbehavior by learners on the resilience of student teachers on teaching practice in COVID-19 era, one of the student teachers, during an interview session, expressed her views as follows:

*Lack of interest in schooling due to prolonged school closure caused learners to misbehave. Most learners had forgotten some learnt concepts. Absenteeism is very high due to lack of interest in schooling, learners just want to play and hunt. Teaching for two sessions per day, that is, the morning and afternoon lesson caused I became very tired, it was so tiresome. The classroom was too small and 54 learners couldn't maintain social distances. The mentor was an administrator so most of the time he was in the administration offices and I was left alone to do all the work. I hard to destroy most of the learning centres to enhance social distancing since the classroom was so small. (Participant STIN: R01).*

Another participant interviewed added that:

*Some learners bullied others so I had challenges disciplining the class due to the banning of corporal punishment. Due to prolonged holidays caused by COVID-19 pandemic, some learners forgot concepts taught, others now drank beer and smoked. There was very high absenteeism especially by learners from child-headed homes because they lacked parental guidance (Participant STIN: R05).*

In corroboration, another informant remarked:

*Misbehavior by learners such as bullying, fighting, stealing were behaviour problems that were challenging to me. Learners did not like schooling; they had developed a negative attitude towards schooling. Some learners played truancy and went to the river to swim with friends while others hid exercise books and not write exercises (Participant STIN: R09).*

When responding to the question on effects of misbehavior by learners on the resilience of student teachers on teaching practice in COVID-19 era, one of the student teachers' mentors, during an interview session, expressed his opinions as follows:

*Because of poor class control, no learning takes place and lesson objectives will not be achieved. At re-opening most of the learners were wild, misbehaved and absenteeism was a bit higher. Learners lacked concentration on schoolwork and it was a big challenge to student teachers. (Participant SMIN: R04).*

Depicted in SMIN: R05's words:

*"Student teachers find it very difficult to discipline learners due to Statutory Instrument P35 that prohibit teachers from inflicting corporal punishment on the learners. Some learners know that student teachers have no right to beat them so they misbehave and disrespect the student teachers".*

Another student teacher's mentor, in an interview, said:

*Student teachers have problems controlling the learners who misbehave and lesson presentation will be a failure. Some learners in the community do not respect student teachers because they are aware that student teachers are not allowed to punish them. Due to a prolonged lockdown period learners developed a negative attitude towards schooling (Participant SMIN: R06).*

When responding to the question on the effects of misbehavior by learners on the resilience of student teachers on teaching practice in COVID-19 era, one of the student teachers, during the focus group discussion, expressed her sentiments as follows:

*Misbehavior by learners caused me to lose marks because learners were mischievous when I taught ChiShona which I am not good at so I lost marks and was stressed. Some of the learners absented themselves and others come but did not participate due to lack of interest in the school caused by prolonged lockdowns. Some learners went out to the toilet and never come back and others did not write written work (Participant FGD01: P03).*

Furthermore, FGD03: P21 claimed that:

*Learners had spent too much time at home due to COVID-19 lockdowns and school closures so learners were now disrespectful. On reopening, the learners had a negative*

*attitude towards school, and engaged in beer drinking and drug abuse. One Grade 7 male pupil proposed love from me. Learners were disobedient and did not write schoolwork. Very high absenteeism made record keeping a problem and it difficult to cover the syllabus.*

Emerging from the extracts above is the view that due to prolonged school closures caused by COVID-19 learner misbehavior was rampant among the learners and student teachers faces serious challenges in disciplining the learners. Absenteeism, truancy and bullying were very high. Most learners had developed a negative attitude towards schooling which was a challenge to student teachers on teaching practice. Student teachers on teaching practice found it very difficult to discipline learners because of Statutory Instrument P35 which prohibit teachers from inflicting corporal punishment on learners. Student teachers on teaching practice experienced numerous behavioral problems from the learners which was a hindrance to their resilience.

#### **4.4.3.2 Adjustments to class and classroom organization**

The majority of student teachers' mentors and student teachers who participated in this research study explained that classes and classrooms had to be re-organized in line with COVID-19 protocols. Most classes were split in half to decongest the classrooms so that it could be easier to maintain physical social distancing. Learning centres were removed or reduced in the classrooms to create space for re-arrangement of furniture to promote social distancing. Results show that these adjustments brought about some challenges to the student teachers as supervisors and external assessors expected to see the recommended number and sizes of learning centres which hindered the resilience of the student teachers on teaching practice in COVID-19 era. The quotations below can help illustrate how adjustments to class and classroom organization hindered the resilience of student teachers.

One of participant expressed her sentiments as follows:

*I changed class room setup to suit activities to be done so as to observe social distancing. I removed learning centres from the class room to enhance social distances but I was penalized by college lecturers as college lecturers expected to see learning centres in the classrooms (Participant STIN: R06).*

One of the student teachers remarked that:

*Splitting of classes caused a lot of pressure on us and it was boring to teach the same concepts twice a day. Due to shortage of furniture, learners were asked to sit on the floor and it caused a lot of discomfort on learners (Participant STIN: R05).*

Another participant added that:

*Splitting of class was inconveniencing, as I had to teach the same concept twice. I could not manage time properly since the class was divide into two to enhance social distancing. (Participant FDGD2: P10).*

During the focus group discussion, one of the student teachers echoed that:

*Teaching for two sessions per day, that is, the morning and afternoon lesson caused I became very tired, it was so tiresome. The classroom was too small and 54 learns couldn't maintain social distances. The mentor was an administrator so most of the time he was in the administration offices and I was left alone to do all the work. I hard to destroy most of the learning centres to enhance social distancing since the classroom was so small. (Participant PGD3: P15).*

One of the student teachers' mentors, in an interview expressed her sentiment as follows:

*We did stagger of classes and we re-arranged furniture to promote social distancing but this left small spaces for indoor learning centres. (Participant SMIN: R04).*

Furthermore, Participant SMIN: R02 claimed that:

*We resorted to hot sitting to enhance social distancing due to lack of class rooms. The seating arrangement was changed to maintain social distancing and we reduced the number and size of learning centres in the classroom.*

The above extracts are an indication that adjustment of classes and classroom organization brought about some challenges which were a threat to the resilience of student teachers on teaching practice in COVID-19 era. Results revealed that splitting of classes, staggering of classes and hot sitting caused pressure of work on the part of student teachers as they had to have

double sessions be day teaching the same concepts. There was no time to rest which caused work overload. From the findings it is clear that learning centres were removed or reduced in order to create space for seating arrangements which promoted physical social distancing. Results are evident that student teachers were criticized and downgraded by college lecturers for not having or for reducing the sizes of learning centres. From the research findings, it was established the adjustment to class and classroom organization posed a number of challenges to student teachers on teaching practice which hindered the resilience of student teachers.

#### **4.4.3.3 Work overload**

When responding to the question on the effects of work overload, one of the student teachers, during an interview remarked:

*I could not update the records because I failed to cover the syllabus due to early dismissals to decongest the school premises. Due to hot sitting, I had no time to plan, do remedial and extension exercises. Again, as student teachers we were expected to do general maintenance so time management was tough. The workload was just too much since I had to mark, update records, teach and cook food (Participant STIN: R01).*

Depicted in Participant STIN: R05's words:

*"Record keeping was a challenge especially the register and reading record because most learners were absent. Time management was a problem due to pressure of work so I had to cheat on evaluation and recorded marks from my head in the progress record book. It was difficult to cover scheme of work due to hot early dismissals so I tried to cover too many concepts in a short space of time and most learners found it difficult to understand the concepts".*

According to Participant FGD3:

P18 *"It was very difficult to update the reading record because some of the learners were always absent. I had very little time to teach the 2 classes per day so I gave learners a lot*

*of homework so that we cover the syllabus. Due to splitting of classes I had to make new records for the new class e.g., registers, progress record book and the reading record book. Learners sat on the floor to enhance social distancing but they were not comfortable especially when writing”.*

Furthermore, Participant SMIN: R05 claimed that:

*“After the lockdown, student teachers had forgotten how to update some of the records. Evaluation was difficult due to early dismissals, we dismiss at 10 o’clock in the morning without having taught all the planned lessons. We started dismissing as early as 10am when one of the student teachers and three learners tested positive to COVID-19. Test record book, progress record book, register and reading record book could not be updated due to high rates of absenteeism”.*

One of the informants postulated that:

*Absenteeism was too high at re-opening because learners had stayed home for too long and were also afraid of contracting COVID-19 virus. However, brilliant learners came to school daily. Seating arrangement was changed to enhance social distancing but the sizes of learning centers were reduced. Due to COVID-19 learning time per day was reduced since we dismissed at 10am. Student teachers ended up cheating by just filling in gaps due to inadequate time and pressure of work. (Participant SMIN: R06).*

Emerging from the above responses from focus group discussions and interviews is the view that work overload was immense due to the splitting of classes, hot sitting and staggering of classes to promote social distancing. Results showed that student teachers had challenges in time management and updating records due to the pressure of work and in some cases, they ended up cheating just to update the records so as to please the supervisors. The findings imply that work overload was overwhelming to an extent that it hindered the resilience of student teachers on teaching practice in COVID-19 era.

We responding to the question on the effects of work overload and time management on the health and social life of the student teachers on teaching practice in COVID-19 era, one of the student teachers, during a focus group discussion expressed her views as follows:

*Due to splitting of class I was given new learners so I had to start afresh the register, reading record book and progress record book causing a lot of pressure of work. I tried to update my class records so I slept very late and wake up at 0300 hours. I dismissed very late when it was dark for me to see. The school was not electrified. Because of pressure of work, I did not have enough time to teach learners as most of the time was spend updating the class records. There was no thorough preparation of work; I only prepared work when I heard that the lecturers were coming to visit us. I updated the reading record, remedial and extension book while at home during the night cheating since I had no time to do the exercises with learners. I suffered from headache, dizziness, tiredness and forgetfulness due to lack of sleep. (Participant FGD1: P02).*

One of the participants remarked that:

*The work load was immense because we had limited time to teach as learners dismissed around 10 a.m. so as to decongest the school. I was diagnosed with anaemia and my feet were swollen always, as the workload was too much. I become anti-social because I had no time to socialize due to pressure of work, socially I become a ghost (Participant FGD2: P14).*

Another participant interviewed added that:

*Due to pressure of work i.e., teaching and record keeping made the time management difficult. The workload was too much because I had to teach two groups of learners per day from 7a.m. to 12p.m. and from 12p.m. to 4p.m. each group needed remedial and extension work and tests. Marking, planning and media making was done during the night. Lack of sleep caused tiredness, harsher and confusions which resulted in ineffective teaching. I did not have time to socialize and become impatient and harsh. (Participant STIN: R06).*

Furthermore, Participant SMIN: R01 said that:

*“Due to pressure of work, the student teachers were stressed and they suffered from hypertension (BP), headaches, eye problems, and doped in class due to lack of rest. Lack of socialization caused stress and poor lesson preparation”.*

In corroboration another participant remarked:

*Pressure of work and teaching many learners caused student teacher attached to me contract COVID-19. Student teachers lacked time to socialize due to too much work. They do not have time to rest. Teaching, marking and updating record books and planning is time consuming and no room for socialization. (Participant SMIN: R03).*

The above extracts are an indication that work overload caused health and social problems for student teachers on teaching practice in COVID-19 era. Results showed that student teachers suffered from health problems such as high blood pressure, headaches, dizziness, fatigue and forgetfulness. Student teachers did not have time to socialize due to the pressure of work so they suffered from isolation. The research findings are suggestive of the view that work overload hinders the resilience of student teachers on teaching practice in COVID-19 era.

#### **4.4.4 Sub-theme 2.4: Teaching Practice supervision**

In this section, the researcher reports on student teachers’ mentors and student teachers’ views on teaching practice supervision in COVID-19 era. The student teachers’ mentors and the student teachers who participated in this study expressed their sentiments on teaching practice supervision in COVID-19 era. Results from the study show that teaching practice supervision by college lecturers and school supervisors was stressful as it lacked thoroughness and mostly erratic due to the fact that the supervisors feared contracting the COVID-19 virus. Participants who took part in this study suggested alternative ways of teaching practice supervision rather than relying on the traditional way of face-to-face teaching practice supervision. Most of the participants were of the view that e-learning platforms such as Google Class or Zoom could be used to supervise student teachers on teaching practice in COVID-19 era.

#### 4.4.4.1 Teaching practice supervision in COVID-19 era

When responding to the question on teaching practice supervision in COVID-19 era one of the student teachers, during an interview postulated that:

*Supervision was not done during the lockdowns since schools were closed. I needed to cover all the work within a short space of time so it was stressful preparing for supervision. College lecturers visited us soon after opening and I was not prepared so I got a low mark because my records were not up to date and had very few charts on display. I panicked because the visit was unannounced. Due to COVID-19 protocols I could not use group work so learner to learner interaction was not possible which affected by teaching and obtained low marks. If college lecturers use zoom and Google classroom, I will be confident however bundles are expensive and I am not able to connect to the Google classroom. (Participant STIN: R01).*

Another student teacher, in an interview, added that:

*Lecturers did not come to supervise us during our first and second term of teaching practice due travel restrictions so we were not sure of our abilities to teach and there was no guidance on suitable teaching methods in COVID-19 era. School based supervisors did not supervise us because they waited for college supervisors to give them the college expectations and supervision guidelines. During our fourth term the school head supervised our records every Monday and lessons after every fortnight. I was psychologically affected because we felt that I did not get enough assistance and felt that I was not fully baked (Participant STIN: R02).*

One of the student teachers postulated that:

*Lecturers were scared to come close to us and it was very scary seeing lecturers wearing COVID-19 robes, hats and gloves. Teaching practice supervision was erratic and we did not get enough assistance. The Deputy Head was scared of contracting COVID-19 so she did not want to supervise me. Preparation for supervision was stressful since I had to sanitize learners, make sure they wear masks properly and maintain social distancing which was an additional burden in addition to record keeping, media making and lesson preparation (Participant STIN: R03).*

In corroboration, another student teacher remarked:

*Supervisors did not supervise us thoroughly since they were afraid of contracting COVID-19 and die. School supervisors did not supervise me regularly because some learners at school contracted COVID-19 so the supervisors were afraid to get into the classrooms or to touch my record books. Lack of inadequate supervision I lacked proper guidance and feedback, which caused anxiety and lack of confidence. SMIN: R02.*

One of the participants remarked:

*Lecturers were afraid of COVID-19 so the record books were not thoroughly supervised. Supervision by school-based supervisors was not affective because they I did not open student teachers' record books to supervise them. Students were not very sure of their teaching skills due to lack of effective guidance (Participant STIN: R05).*

The above verbatim quotes revealed that lack of thorough supervision and feedback was discouraging as supervision did not help student teachers improve their teaching competencies. Most of the supervisors did not do a thorough job because they were afraid of contracting the COVID-19 virus. Due to the need to maintain social distancing and use methods which did not spread COVID-19 during supervision student teachers were overwhelmed with work. Data also revealed that supervisors' visits were done unannounced which caused panic among the student teachers.

One of the student teachers' mentors elaborated on the subject of teaching practice supervision in COVID-19 during an interview as follows:

*No supervision was done at the pick of the COVID-19. Supervision was not regular. Due to staggering of classes and need to complete, the syllabus school supervisors did not have time to supervise student teachers. Lack of supervision means no learning was taking place and student teachers continued doing the wrong things and they were also not confident of what they were doing. (Participant SMIN: R04).*

Another participant expressed her sentiments as follows:

*Very minimum supervision was done and the school supervisors were afraid of touching the record books. Student teachers lacked supervision, lacked guidance and advice so they were half-baked. (Participant SMIN: R05).*

Another student teacher's mentor interviewed added that:

*School heads and deputy heads were work bound in their offices but mentors managed to supervise the student teachers. Supervise did not detect some errors done by student teachers so they did not give student teachers adequate and constructive advice. (Participant SMIN: R06).*

One of the student teachers' mentors elaborated on the subject of teaching practice supervision in COVID-19 during a focus group discussion as follows:

*The supervision was not thorough as they school based supervisors were afraid to open our class records and did not want to stay in the classrooms for a long time due to fear of contracting COVID-19. (Participant FGD1:P02)*

Another participant added this:

*Teaching practice supervision was stressful because we were not able to use some of the teaching methods because at our college learning was disturbed by the outbreak of COVID-19 and colleges closed before we covered the syllabus. (Participant FG2:P08).*

Another participant postulated that:

*Due to prolonged lockdowns learners ended up forgetting learnt concepts and I ended up having three distinct groups in the classroom i.e., slow learners, average learners and fast learners and it was difficult to teach 3 different groups. In trying to conduct remedial lessons with slow learners after others had dismissed their parents did not like it because they wanted learners to come home and do household chores at home so they reported me to the school head. Supervision was stressful due to limited time due to hot sitting so we could not update some records e.g., reading record, test record book and progress record book. FGD3:P19.*

In addition, one student teacher opined that:

*College lecturers were very kind and helpful. They taught us new ideas on how to teach using methods which do not spread COVID-19. However conflicting instructions and comments by different lectures caused confusion. (Participant STIR08).*

Emerging from the above responses from student teachers' mentors and student teachers is the view that teaching practice supervision was erratic and not thorough so student teachers did not benefit much. Supervisors failed to detect errors made by student teachers in the teaching practice documents. Results show that both college lecturers and school-based supervisors were afraid of doing thorough supervision of the teaching practice records due to fear of contracting the COVID-19 virus. Research findings revealed that conflicting comments given by different supervisors caused confusion and stressed the student teachers. Data showed that a few school-based supervisors had no time to supervise student teachers and give them professional advice because they were overwhelmed with the need to cover the syllabus as most of the learning time was lost due to school closures caused by COVID-19. It emerged from the findings is the view that some college lecturers were harsh to student teachers and downgraded their marks without valid reasons. However, some of the participants felt that the majority of lecturers were kind and helpful. Most of the student teachers felt that newly appointed lectures lacked expertise in supervision which disadvantaged the student teachers as they were awarded low marks without justification which demoralized them. The majority of the student teachers highlighted that they were stressed because they were penalized for failing to enforce COVID-19 protocols, especially proper masking up and maintaining physical social distancing during lesson execution. Research findings seem to suggest that teaching practice supervision posed a lot of challenges to student teacher which was a hindrance to their resilience.

#### **4.4.4.2 Alternative ways to face-to-face teaching practice supervision**

When responding to the question on, teaching practice supervision in COVID-19 era, one of the student teachers, during an interview suggested alternative ways of supervision to be used in COVID-19 era as follows:

*An alternative way of supervision is the use of Google class or zoom to supervise student however face to face supervision is more effective than e-learning supervision because it captures all the teaching techniques expected of a student teacher such as lesson execution, class control, classroom management and reinforcement techniques (Participant STIN: R09).*

Another student teacher added that:

*Online supervision is the best in the COVID-19 era, i.e., sending record books online to college and videos on lesson execution for lecturers to observe videos on lesson presentation and award marks. However, lack of ICT gadgets, electricity and poor network coverage and lack of technological knowledge on the part of student teachers and the supervisors hinder the use of online supervision (Participant STIN: R05).*

One of the student teachers, in an interview, remarked that:

*No supervision was done due to COVID-19 during our first term on teaching practice. T.P. supervision was irregular and lacked thoroughness. Alternatively, ICT platforms can be used to send soft copies of record books and videos on lesson presentation to college for supervision. (Participant STIN: R08).*

In an interview, one of the student teachers' mentors postulated that:

*Alternatively, supervision can be done with videos but it is expensive and leaves out some elements like children's exercise books (Participant SMIN: R05).*

One of the student teachers' mentors explained that:

*College supervisors should be polite and understanding and consider the challenges we are facing e.g., the COVID-19 pandemic, economic challenges and lack of stationery. Lecturers should not penalize us. Student teachers should not buy everything but should improvise charts and media. (Participant FGD2:P11).*

The quotations above showed that online teaching practice supervision was the safest during COVID-19 pandemic. However, most participants felt that lack of internet infrastructure and

lack of technological knowledge on the part of supervisors and student teachers hindered online teaching practice supervision.

When responding to the question on, teaching practice supervision in COVID-19 era, one of the student teachers, during a focus group discussion, suggested alternative ways of teaching practice supervision to be used in COVID-19 era as follows:

*There is need for a workshop on teaching practice supervision between lectures and school supervisors so that the comments do not conflicts and marks awarded to do not vary too much. Interpretation of the supervision instruments should be standardized so that supervisors do no disadvantage student teachers. School supervisors should be given handouts on college expectations so that the supervision is synchronized. (Participant FGD2:P12).*

Another student teacher echoed her sentiments as follows:

*Being downgraded for example from 78 % to 63% demotivated us especially when the lecturer fails to justify the mark awarded. The newly appointed lecturers cause a lot of confusion, so they need thorough induction on teaching practice supervision. The new lecturers should be well versed with all the records and should be able interpret and use the supervision instrument. (Participant FGD3:P16).*

One of the student teachers expressed his views as follows:

*Use of videos -e- supervision where the student teacher is supervised through a video sends to the college. The student teacher won't feel afraid, and learners will be free to participate. (Participant FGD1:P04).*

*The student teacher should not be left alone to manage the class, if the mentor dies the Ministry of Education should quickly replace the teacher or the student teacher should be attached to another mentor to avoid too much pressure of work and also for the student teacher to develop teaching competences from the mentor (Participant FGD2:P10).*

The above quotations suggest that face-to-face teaching practice supervision should be replaced by online supervision if there is an outbreak of a pandemic like COVID-19. Results show that

online teaching practice supervision could be done using e-learning platforms such as Google Class, zoom or Microsoft Teams. However, some participants felt that online supervision could be a challenge due to constant power cuts, lack of electricity in most schools, lack of ICT gadgets, expensive data bundles and lack of technological knowledge by student teachers and supervisors. Both the student teachers' mentors and the student teachers were of the opinion that the college lectures and student teachers' mentors should hold teaching practice supervision workshops so that they can interpret the teaching practice supervision in the same way. The majority of the student teachers felt that newly appointed lecturers should be inducted on teaching practice supervision so that they know the college expectations and administer the teaching practice instruments correctly. Most of the participants were of the idea that the Ministry of Primary and Secondary Education should quickly replace student teachers' mentors who died due to COVID-19 or other natural causes to avoid work overload on the part of the student teacher.

#### **4.4.5 Discussions of Findings of Theme 2**

##### **4.4.5.1 Student teachers' teaching competences**

Research findings concur with several research studies by other scholars (Abas, 2016; Wells, Hainline & Smalley, 2019) which revealed that the dominant problems of student teachers in teaching practice are scheming, planning, classroom management, mentors, peers, learners, and assigned tasks. It emerged from the study that student teachers lacked the basic teaching competencies of scheming, planning, lesson execution and record construction and keeping because the student teachers were not adequately prepared for teaching practice during their first residential phase in college due to college closure caused by COVID-19. Participants revealed that student teachers learned for only two terms instead of three terms, and learning during the third term was done through e-learning which was not effective as lectures send notes through WhatsApp. Findings further revealed that most student teachers lacked content knowledge of the newly introduced subject like Visual and Performing Arts, and had problems controlling learners who misbehaved in the absence of student teachers' mentors. The results from this study concur with Gutierrez, *et al.*, (2016) findings, who asserted that student teachers on teaching practice's stressors and anxieties emanate from subject content knowledge, instructional strategies,

workload, classroom discipline, and relationships with learners, cooperating teachers and parents. As a result of the lack of teaching competencies, teaching practice creates a mixture of anticipation, anxiety, excitement and apprehension in the student teachers as they commence their teaching practice (Rembe, Shumba & Mavuso, 2016) a situation which was exacerbated by the COVID-19 pandemic.

The current study's findings resonate with a (2015) study by Roberts-Hull which evaluated teacher education programs in some countries, including the United States of America and Australia identified common challenges that hinder the resilience of student teachers such as insufficient subject matter knowledge and an inadequate link between theory and practice. Research findings revealed that the majority of the student teachers had adequate content knowledge for the usual subjects but lacked content knowledge for the newly introduced subjects of the curriculum, for example, Visual and Performing Arts, Heritage Social Studies, Family Religion and Moral Education and Information and Communication Technology. Furthermore, data showed that fear of contracting the COVID-19 virus and lack of teaching skills caused a lot of stress and a lack of confidence in student teachers. This study's findings are consistent with a study by 2014 study by Thieman, Marx and Kitchel, which revealed that student teachers felt that they were adequately prepared for the content knowledge demands; however, many expressed uncertainties regarding their ability to relate their content knowledge and relevant personal experiences to their learners in an effective manner. This view is also corroborated by a study by Napanoy, Gayagay & Tuazon (2021) who point out that the present generation of student teachers are good at their subject competency but fail in their part of lesson delivery.

The research findings resonated with a perusal of the literature which confirmed that the sudden metamorphosis of teaching activity from the face-to-face model to the online modality reveals the existence of gaps (Miralles-Martinez, 2014): the access gap, the use gap, and the gap in teacher skills, availability of resources, and adaptation of online platforms to support teaching. This preceding research study has established that student teachers lacked technological pedagogical content knowledge, lacked knowledge of e-learning platforms, found it difficult to access the internet due to limited internet connectivity and had no computers or smartphones as they were expensive. This view is also corroborated by other scholars (Fernandez-Enguita & Vazquez-Cupeiro, 2017) who posit that recent research shows deficits about the digital

competence of student teachers although the student teachers showed a positive attitude toward Information and Communication Technology.

#### **4.4.5.2 Poor relationships**

The findings of this study are consistent with Soleas & Hong (2020) who posit that professional work challenges like poor relationships, for example, poor relationships with student teachers' mentors, school administrators, college lecturers, peer student teachers, learners and students' parents, hinder resilience in student teachers on teaching practice. Results from the current study showed that as a result of poor relationships with school administrators, the student teachers felt degraded, humiliated, dehumanized and lacked professional and social support a situation which hindered their resilience on teaching practice. It emerged from this study that a few student teachers had poor relationships with the student teachers' mentors a situation which caused a tense atmosphere in the classroom. Due to poor relationships, student teachers' mentors found it difficult to give professional and social support to student teachers and also the student teachers found it difficult to ask for help and lost all the confidence. The findings of this study corroborate Coskun's (2013) findings which indicated that mentors felt themselves under pressure because of being observed by the student teachers and they found it difficult to collaborate and establish effective communication with the student teachers. Furthermore, the findings of this study established that student teachers complained that they were not treated like a teacher by some school administrators and student teachers' mentors, and were forced to fulfill the mentors' personal daily tasks, student teachers were also not provided adequate feedback and support for their teaching (Koksal and Genc, 2019). While confirming the results of this study, Rakicioglu-Soyalemez (2014) reiterated that student teachers were not satisfied with the assistance provided by mentors in terms of teaching strategies, problem-solving skills and new teaching ideas lack their lack of respect.

Jordan (2006) maintains that growth-fostering connections are characterized by *mutuality*, *empowerment* and the development of *courage*. In this regard, the research findings of this study contradict Jordan's (2006) finding as the findings revealed that mutuality, empowerment and development of courage were in a few cases hindered by poor relationships. It further emerged from this study that a few lectures, school administrators and student teachers' mentors were

harsh, cruel, intolerant, disrespectful and shunned student teachers who once contracted the COVID-19 virus. The results of this study corroborate those of Koksai and Genc's (2019) study which pointed out that student teachers complained about the biased and intolerant behaviors of their college lecturers as well as their indifference. Findings from this study revealed that a few learners were disrespectful, stubborn, and violent and issued some threats to student teachers as a result they felt threatened and vulnerable. The findings of this study further revealed that in isolated cases student teachers had conflict with each other, lacked cooperation amongst themselves and spread rumors about fellow student teachers causing a lot of disharmony, friction and isolation. Implicitly, participants felt that due to poor relationships, there was no mutuality and empowerment. Results also show that the development of courage to face challenging situations related to teaching and the COVID-19 pandemic was hindered by poor relationships. Jordán (2006) further remarked that when supportive and mutual relationships exist, the individual is empowered and the person becomes stronger, self-confident and exhibits the characteristics of the resilient person of which in this study poor relationships militated against the development of resilience of student teachers on teaching practice during COVID-19 pandemic.

#### **4.4.5.3 Threats to student-teacher resilience**

The findings from this study concur with those of Koksai and Genc's (2019) study which pointed out that the primary challenges hindering the resilience of student teachers on teaching practice were related to classroom management issues. It emerged from this study that due to prolonged school closures induced by COVID-19, on re-opening some learners had developed a negative attitude towards schooling and exhibited behavioral problems such as bullying, fighting, drug abuse and stealing. Data revealed that student teachers had serious difficulties in keeping the classroom quiet and on task as some learners were disrespectful, stubborn, and violent and issued some threats to student teachers on teaching practice which hindered their resilience because student teachers felt threatened and vulnerable. Linked to the findings of this study Napanoy, Gayagay & Tuazon (2021) espoused that student teachers felt belittled in terms of classroom management as learners behave well in the presence of the class teacher and misbehave when their class teacher is out. The findings confirm Koksai & Genc's (2019) findings who posit that

dealing with reluctant learners and their disruptive behaviors were also among the challenges reported by the student teachers.

This study's findings are consistent with Beltman's (2021) study which established that school organization, that is, moving rooms and lots of meetings, complaints by parents, and lack of teaching materials and resources were some of the challenges that hinder the resilience of student teachers on teaching practice. Results from this study revealed that splitting of classes, staggering of classes and hot sitting as measures put in place to curb the spread of COVID-19 caused pressure of work on the part of student teachers as they had to have double sessions every day teaching the same concepts. It further emerged that student teachers had no time to rest due to work overload which caused fatigue, headaches, high blood pressure, dizziness, forgetfulness and confusion in student teachers. Participants revealed that time management, finding learning media and removal of learning centres from the classrooms to create space for social distancing posed a lot of challenges. Furthermore, the results of this study also revealed that the student teachers did not have time to socialize as they were overwhelmed with schoolwork. The findings of this study are commensurate with Beltman's (2021) study which showed that a lack of work-life balance and feeling overwhelmed with work were challenges to student-teacher resilience.

#### **4.4.5.4 Teaching practice supervision**

The findings of this study are commensurate with a study conducted by Konyana & Motalenyane (2022) on teaching practice supervision in the COVID-19 era which revealed that teaching practice supervision by both school-based supervisors and college lectures encountered several challenges. It emerged from this study that teaching practice supervision was erratic and not thorough so student teachers did not benefit much. Data revealed that supervisors failed to detect errors made by student teachers in the teaching practice documents. Participants further explained that both college lecturers and school-based supervisors were afraid of doing thorough supervision of the teaching practice records due to fear of contracting the COVID-19 virus from the documents. The majority of the participants felt that newly appointed lecturers should be thoroughly inducted on teaching practice supervision so that they know the college expectations and administer the teaching practice instruments correctly to avoid conflicting comments which

confuse the supervisees. Findings revealed that most of the student teachers' mentors and the student teachers were of the opinion that the college lectures and student teachers' mentors should hold teaching practice supervision workshops so that they can interpret the teaching practice supervision instruments in the same way. Their view corroborates those of Aglazor (2017) who alludes that the supervisors should be well acquainted with the professional teacher training and performance experts charged with evaluating and assessing student teachers during teaching practice

As established by Kim (2020) the results of this study indicated that due to school closure induced by COVID-19, within a short space of time, educators had to redesign and arrange online teaching schedules so that student teachers could meet with the supervisors and also to teach children online in order to meet the teaching practice requirements (Kim, 2020). A study by Tekel, Bayir & Dulay (2022) revealed that England, Portugal and Hong Kong implanted online education while Canada, Malaysia and Zimbabwe abolished the teaching practice requirements to complete the teaching practice with online education due to a lack of internet infrastructure. It emerged from this study that online teaching practice supervision could not be done using e-learning platforms such as Google Class, zoom or Microsoft Teams due to constant power cuts, lack of electricity in most schools, lack of ICT gadgets and expensive data bundles. The findings resonated with an earlier study by Moyo (2020) who indicated that the challenges facing online education, including online teaching practice supervision, were lack of internet, high cost of mobile devices and broadband, lack of mobile learning management systems, resistance to change by lecturers and lack of WIFI connectivity. In a similar study, Manu and Owusu-Ansah (2019) opined that the school closures due to COVID-19 robbed student teachers of the teaching experience they were supposed to get because experience is important in teaching skills acquisition and it is gained over some time.

#### **4.5 Theme 3: Personal and contextual resources that contribute to resilience outcomes in student teachers on teaching practice in COVID-19 era**

In this section, the researcher presents participants' views on their lived experiences regarding the personal and contextual resources that contribute to resilience outcomes in student teachers on teaching practice in COVID-19 era. The theme was developed after analyzing data generated

from focus group discussions and semi-structured interviews held with the student teacher’ mentors and student teachers who were on teaching practice. The researcher categorized data into four sub-themes, namely, a) personal resources; b) contextual resources; c) resilience strategies employed to promote resilience of student teachers on teaching practice in COVID-19 era.

**Table 4.5.1 gives an overview of Theme 3 and its sub-themes**

<b>THEME 3</b>		
Personal and contextual resources that contribute to resilience outcomes in student teachers on teaching practice in COVID-19 era.		
<p><b>Sub-theme 3.1 Personal resources</b></p> <p><b>Categories</b></p> <p>3.1.1 Emotions</p> <p><b>3.1.2 Motivation</b></p> <p>3.1.3 Self-efficacy</p> <p>3.1.4 Social competence</p> <p>3.1.4 Pedagogical Content Knowledge</p>	<p><b>Sub-theme 3.2</b></p> <p>Relational resilience as a contextual resource</p>	<p><b>Sub-theme 3.3</b></p> <p>Coping strategies</p>

**4.5.1 Sub-theme 3.1: Personal resources**

**4.5.1.1 Emotions as personal protective factors**

All the student teachers’ mentors and student teachers who took part in this study described the emotional state of student teachers on teaching practice in COVID-19 era from their lived experiences. The majority of the participants felt that most student teachers were worried, anxious and demoralized by the COVID-19 situation. However, all the participants described a variety of strategies which were employed by the student teachers to promote positive emotions which cultivated their resilience on teaching practice in COVID-19 era. In line with the above findings, one of the student teachers, in an interview explained:

*I had mixed emotions since my learners interested me but at the same time some learners and Deputy Head discouraged me. I got ill due to COVID-19 and got very worried that I*

*was going to die. However, I socialized a lot and got vaccinated against COVID-19 to boost my hope and chances for survival (Participant STIN: R01).*

Another student teacher, in an interview expressed her sentiments as follows:

*I was frustrated and felt hopeless because of the workload the threat of COVID-19. I sit down and cry it out because the pressure was too much and it was my first time to teach in the rural areas without electricity, using candles for lighting while writing my records. Life was unbearable. (Participant STIN: R03).*

One of the student teachers, during a focus group discussion, voiced her sentiments as follows:

*My morale was very low and I developed a negative attitude towards teaching since it exposes me to high chances of contracting COVID-19 by interacting with many learners. I was very scared because 6 learners in my class contracted the COVID-19 virus. My morale was very low. (ParticipantFGD1:P07).*

Another student teacher, in a focus group discussion session, added that:

*Teaching practice was so painful because there was pressure of work within a short space of time, I was demoralized. Learners wanted to be too close to me so I was worried that I may contract the COVID-19 virus. Was afraid of contracting COVID-19 since learners were not tested or vaccinated against COVID-19. I used to sing songs and crack jokes with the learners to boost my emotions. (Participant FGD3: P16).*

One of the student teachers' mentors, in the interview session, had this to say:

*Students were not happy at all due to low allowances and fear of contracting COVID-19. They felt bad because they did not have enough money to buy stationery, masks and sanitizers. COVID-19 caused a lot of anxiety and uncertainty. (Participant SMIN: R01).*

In corroboration, another student teachers' mentor said:

*Lack of supervision caused lack of confidence and unhappiness. Even mentors did not help student teachers thoroughly due to fear of contracting COVID-19. Student teachers*

*were not happy at all especially when masks and sanitizers were in short supply.*  
(Participant SMIN: R05).

The above extracts seem to suggest that student teachers on teaching practice in COVID-19 era were worried and not happy. The student teachers felt unsafe as the COVID-19 virus was life-threatening.

Findings revealed that though most of the student teachers were unhappy and worried they employed some strategies to boost positive emotions that saw them soldier on with teaching practice in COVID-19 era. One student teacher, in the interview, had this to say:

*Teaching using songs and dance made the teaching-learning interesting. I interacted with all the staff members and the socialization gave me peace of mind. Engaging in practical subjects e.g., Agriculture and Physical Education boosted my morale in the class.*  
(Participant STIN: R01).

Another student teacher remarked that:

*Listening to music while updating my records made me happy. I talked a lot to my parents; they really motivated me when I was sad. My parents were my pillar of strength. Taking a straw alone, just admiring the environment relieved stress. I got vaccinated and prayed to God for protection. I played games, and sang rhymes which helped to motivate me for emotional wellbeing. Prayer groups, prayers, group discussions and telling stories in groups as student teachers relieved stress.* (Participant STIN: R03).

Furthermore, Participant STIN: R07 said:

*Cracking jokes, singing and dancing with the learners reduced stress and made my learners and me happy. Sharing ideas with fellow student teachers makes me feel relieved. Praying to God kept me in high spirit. I had peace of mind because I was fully vaccinated. I used to pray, sing and dancing with my class just to refresh.*

In line with the above sentiments from the student teachers, one of the student teachers' mentors had this to say:

*Student teachers worked as a team and encouraged each other to carry on with teaching practice. Student teachers provided their own masks and sanitizers to feel safe to do their work. They also were vaccinated against COVID-19. (Participant SMIN: R02).*

Another student teacher's mentor interviewed added that:

*Student teachers created WhatsApp groups and shared ideas with other people. They prayed as a group during the evening. Student teachers provided their own masks and sanitizers to feel safe to do their work. They also were vaccinated against COVID-19. Most student teachers shared the problems with someone to get advice on how to solve the problems while others cried to be relieved and prayed to God. (Participant SMIN: R03).*

One of the student teachers, during the focus group session, voiced his sentiments as follows:

*Fasting as individuals and as groups raised our hopes to survive and continue with teaching practice. Communicating with others through WhatsApp groups gave us a positive mind. (Participant FGD1:P03).*

Another student teacher added that:

*On pay days I used to get into town and spoil myself by buying goodies for myself and my siblings. I played games on my smart phone just to refresh my mind and forget the dangers of COVID-19 for a while. (Participant FGD2:P08).*

In corroboration, another student teacher remarked:

*I used to go to Early Childhood Development (ECD) classes to sing songs, dancing and playing games with the pre-school children. We had a prayer group and we had faith in God that he will solve our problems. I accepted the COVID-19 situation and moved on with life. (Participant FGD2:P11).*

The above responses seem to suggest that the majority of student teachers used several strategies to promote positive emotions. Results showed that the majority of student teachers on teaching practice in COVID-19 era employed strategies such as; teamwork, seeking advice, socialization, praying, fasting, singing, dancing, taking a walk, playing games on smartphones, and

communicating through social media platforms for example WhatsApp and face book to promote emotional wellbeing. Many of the student teachers accepted the COVID-19 situation they found themselves in and lived positively with the COVID-19 situation. Most of the student teachers were vaccinated against COVID-19 virus to boost their safety a strategy which promoted their emotional well-being on teaching practice in COVID-19 era resulting in resilience outcomes.

#### **4.5.1.2 Motivation as a personal protective factor**

The majority of student teachers' mentors and most of the student teachers were of the opinion that both intrinsic and extrinsic motivation helped most of the student teachers to continue with teaching practice through they faced numerous challenges as a result of the outbreak of COVID-19. The majority of student teachers were motivated by the zeal to complete the course and passion for being a teacher. The need to obtain a diploma in education certificate and words of encouragement from the college lecturers, student teachers' mentors, family members gave the student teachers the impetus to carry on with teaching practice in COVID-19 era. One of the student teachers, in the interview session, had this to say:

*I was greatly motivated by my parents worked hard to pay my fees under very difficult economic conditions. Improvement in my mark grades motivated me a lot. The fact that learners actively participated and were very cooperative really motivated me to continue with teaching practice even though my life was in danger with COVID-19. (Participant STIN: R01).*

One of the student teachers expressed his sentiments as follows:

*The school head motivated and encouraged me to become an effective teacher. As student teachers, we encouraged each other to carry on with teaching practice because the COVID-19 pandemic was not the end of life. My husband motivated me to continue with course since there is life after the pandemic (Participant STIN: R02).*

Another student teacher explained:

*Learners motivated me so much because they had a positive attitude towards schooling which gave me the vigour to continue with Teaching Practice. I was encouraged by my*

*parents to complete the course and be counted as someone who attained a Diploma in teaching. Socializing and words of encouragement from colleagues motivated me to proceed with T.P. (Participant STIN: R04).*

Another student teacher also added that:

*STIN: R09. I was proud that I was training to become a teacher, Teaching Practice allowances, need to complete the course and words of encouragement from relatives and friends motivated me to soldier on with T.P. (Participant STIN: R04).*

The above views imply that student teachers were motivated by the desire to complete the course so that they get a diploma in education and earn a living as qualified teachers. The majority of the student teachers were motivated by their relatives, friends, student teachers' mentors and the college lecturers however a few got discouraging comments from their friends, only to be admired when they received their teaching practice allowances from the government.

When responding to the same question on motivation, one of the student teachers' mentors, during an interview session voiced her sentiments as follows:

*Student teachers were motivated to complete TP because they wanted to be educated and earn a learning after completing the course. Encouragement from mentors, relatives and friends gave student teachers the impetus to continue with TP. (Participant SMIN: R03).*

Another student teacher's mentor remarked that:

*The zeal of wanting to complete the course motivated student teachers to complete the course. Student teachers had a torrid time while on T. P. because of challenges induced by COVID-19, however they continued so as to finish their course to fulfill their dreams and get employment. (Participant SMIN: R06).*

Another student teachers' mentor added that:

*Student teachers were motivated by career aspirations as they needed to fulfill their dreams of becoming teachers and lecturers and mentors were their role models. (Participant SMIN: R04).*

The above quotations seem to suggest that student teachers were motivated to complete teaching practice in COVID-19 era due to their zeal to become teachers and also words of encouragement from their mentors, relatives and friends. Results revealed that both intrinsic and extrinsic motivation were key personal protective factors which promoted the resilience of student teachers on teaching practice in COVID-19 era.

#### **4.5.1.3 Self-efficacy**

Most of the participants who took part in this research study described self-efficacy as a personal protective factor which promoted the resilience of student teachers on teaching practice in COVID-19 era. Results of the study showed that most student teachers had confidence and believed that they were on top of the situation despite being in danger of the COVID-19 pandemic. In line with the above, one of the student teachers during the interview session had this to say:

*Just knowing that learners liked me and look up to me for their learning really motivated me. I felt that I was now an expert teacher due to higher participation by learners and very high pass rate by the learners that really motivated me. (Participant STIN: R03).*

Another student teacher added this:

*I was very confident and I knew the teaching strategies to use to help learners understand though I had to read widely so that I understand content for newly introduced subjects such as Heritage Social Studies (Participant STIN: R05).*

One of the student teachers, in a focus group discussion remarked:

*Despite the challenges caused by the COVID-19 pandemic I developed a positive attitude towards my work so I really enjoyed doing the work and a sense of pride for being a competent student teacher. (ParticipantFGD2: P10).*

One of the student teachers' mentors, in an interview said:

*Most student teacher believed in their abilities to prevent COVID-19 and in teaching the learners which developed a sense of being in control of the whole situation. Self-*

*efficiency boosted self-esteem and intrinsically motivated student teachers to continue with TP. (Participant SMIN: R01).*

In corroboration, another student teachers' mentor remarked:

*Most student teacher believed in their abilities to prevent COVID-19 and in teaching the learners which developed a sense of being in control of the whole situation. Self-efficiency boosted self-esteem and intrinsically motivated student teachers to continue with TP. (Participant SMIN: R01).*

The above quotes seem to suggest that most of the student teachers believed in their abilities to manage the classroom, compile class records, protect themselves and the learners from COVID-19 and their teaching skills through encouragement from their significant others and also by observing their colleagues. A sense of pride in their abilities enabled the student teachers to thrive amidst a host of challenges brought about by the outbreak of the COVID-19 pandemic. Self-efficiency boosted self-esteem and intrinsically motivated student teachers to continue with teaching practice in COVID-19 era.

#### **4.5.1.4 Social competence**

The majority of the participants revealed that social competence protected the student teachers from the stressors caused by COVID-19 and cultivated resilience of student teachers on teaching practice in COVID-19 era. Research findings show that most of the student teachers were outgoing. Despite the COVID-19 restrictions, the majority of student teachers were able to safely socialize with fellow student teachers, the student teachers' mentors and the learners however a few student teachers were reserved and were not sociable. In support of the above views, one of the student teachers, during the interview session, remarked:

*I socialize with all the qualified teachers and all the student teachers and they ended up being so friendly and helpful. Socializing with many people reduced stress in me. We shared information on how to protect ourselves against COVID-19 and I passed the information to learners. (Participant STIN: R01).*

Another student teacher interviewed added that:

*I socialized very much with the parents and learners to any extent that they wanted me to stay at their school permanently. Female mentors were jealous with me thinking that I was in love with my male mentor since we were friendly to each other so I felt bad. Our interactions as student teachers were very cordial and we shared ideas and discussed challenges, we were facing on teaching practice in COVID-19 era. (Participant STIN: R02).*

Another student teacher added this:

*Physical contact was discouraged so I had to socialize with friends and relatives on social media platforms like WhatsApp. I felt relieved through talking to other people who gave me hope and confidence. The more I socialized the more I got ideas and ways on how to teaching in COVID-19 era which benefited me a lot. (Participant STIN: R03).*

Similarly, one of the student teachers, in a focus group discussion, expressed her views as follows:

*I freely socialized with all the staff members and fellow student teachers who helped gain a lot information on planning, lesson presentation and advice on how to solve social problems. Social competence helped me to get ideas and decision making on how to solve some problems, we encouraged one another through interaction with other people. I avoided direct conflicts with mentor and accepted advice from the mentor. (Participant FGD3: P19).*

In support of the above view, one of the student teachers, during a focus group discussion, remarked:

*I freely socialized with all the staff members and fellow student teachers who helped gain a lot information on planning, lesson presentation and advice on how to solve social problems. Social competence helped me to get ideas and decision making on how to solve some problems, we encouraged one another through interaction with other people. I avoided direct conflicts with mentor and accepted advice from the mentor. (Participant FGD2: P08).*

When responding to the same question on the influence of social competence on the resilience of student teachers on teaching practice in COVID-19 era, one of the student teachers' mentors, in the interview session voiced her sentiments as follows:

*Social Competence helped student teachers to share ideas and show each other supervision crits, and discussed the comments so as to improve on grey areas identified. The student teachers easily consulted others and seek advice if they meet problems and people were free to assist them. (Participant SMIN: R06).*

Another student teacher's mentor posited that:

*Socialization helps student teachers gain knowledge on issues to do with teaching. One gets more information on how to teach safely in the COVID-19 era. Student teachers who can socialize can easily ask for assistance and guidance from other student teachers and mentors. Due to social competence student teachers could easily air out their problems and get help from others. A problem told to a friend is half solved. (Participant SMIN: R01).*

Research findings seem to suggest that most of the student teachers were socially competent. According to the views of the student teachers' mentors and the student teachers, most of the student teachers could easily seek help from their mentors, college lecturers and the school administration. The majority of the student teachers shared ideas with their colleagues. Though there were COVID-19 restrictions on physical social interaction, most student teachers socialized with their family members, friends and colleagues through WhatsApp. The above findings are suggestive of the view that social competence promoted the resilience of student teachers on teaching practice in COVID-19 era.

#### **4.5.1.5 Pedagogical content knowledge**

The majority of student teachers' mentors and student teachers who participated in this study explained that during the student teachers' first term on teaching practice most student teachers lacked pedagogical content knowledge. The majority of the participants felt that the majority of student teachers gradually developed pedagogical content knowledge as teaching practice

progressed however COVID-19 derailed the process. In support of the above views, one of the student teachers, during a focus group discussion, remarked:

*When I started teaching practice, I lacked knowledge on how to teach and also how to use teaching methods which did not spread COVID-19 but my mentor helped improve on this. Knowledge of teaching methods helped us to feel safe and encouraged us to continue with teaching practice. Use teaching methods suitable for the COVID-19 era encouraged me to teach however when I started teaching practice, I lacked the teaching competence though I knew the subject content. (Participant FGD1:P02).*

Another student teacher postulated that:

*During first term of my teaching practice, I was afraid of standing in front of the learners teaching due to lack of teaching skills. After a term I had developed some teaching skills so I felt a bit confident though I doubted my competences. I did not get enough time to practice teaching due to several school closures that we experienced due to COVID-19. (Participant FGD3:P21).*

In corroboration, another student teacher remarked:

*When I started teaching practice it was hell on earth because I had no idea of how to teach. After a few weeks of practice, I mastered the art of teaching with the help of mentor. I really enjoyed teaching and felt that I was now an expert which boosted my confidence. Effective use of appropriate teaching methods which catered for individual differences developed my confidence after realizing a great improvement in the performance of the learners. (Participant FGD3:P17).*

When responding to the same question on the influence of pedagogical content knowledge on the resilience of student teachers on teaching practice in COVID-19 era, in the interview, one of the student teachers, expressed her views as follows:

*At first, I did not have the knowledge but after some practice I mastered the teaching methods which boosted my resilience. I mastered a variety of teaching techniques e.g., demonstration, motivating learners really due my confidence. (Participant STIN: R01).*

Another student teacher opined that:

*Mastery of teaching strategies and content knowledge made me feel that I was an expert however before I mastered the teaching strategies, I felt worried. My mentor encouraged me by giving subject contented and tips on how to deliver a lesson. (Participant STIN: R02).*

One of the student teachers said the following:

*I lacked content in subject such as I.C.T and Mass Display, which caused lack of confidence. Technological pedagogical content knowledge was a challenge since the college did not prepare us to use ICT gadgets for teaching. Prolonged lockdowns caused us to forget some teaching strategies and again lack of content knowledge in some topics e.g., World Religions like Islamic Religion, Judaism and African Traditional Religion was a challenge really. (Participant STIN: R09).*

Another participant echoed that:

*I lacked pedagogical content knowledge because we did not cover the syllabus at college due to lockdowns and school closures caused by COVID-19. I found FAREME difficult to teach due to lack of subject content. The mentors had to work hard to develop pedagogical content knowledge in us. Eventually we mastered pedagogical content knowledge which boosted our confidence to teach. (Participant STIN: R10).*

One of the informants said the following:

*Knowledge of teaching methods boosts the student teachers' interest to teach and raises self-esteem. Content knowledge boosts student teacher interest to teach. Student teachers asked for help on the teaching methods and content for different subject from mentors, which boosted their confidence. (Participant SMIN: R01).*

The verbatim quotes above revealed that most of the student teachers went on teaching practice ill-prepared to teach as they lacked the teaching competencies. Through the help of student teachers' mentors, the school administrators and peers the student teachers gradually mastered the art of teaching which boosted their confidence and self-esteem.

When responding to the same question on the influence of pedagogical content knowledge on the resilience of student teachers on teaching practice in COVID-19 era, in the interview, one of the student teachers' mentors expressed his views as follows:

*Mentors assisted the student teachers develop teaching skills and performed very well in lesson presentation and classroom management which helped them to develop self-confidence. Textbooks and reading from internet boosted the student teachers' content knowledge resulting in self-confidence. (Participant SMIN: R02).*

Another student teacher's mentor added this:

*Students have knowledge in using some of the teaching methods and have the content however; they need our assistance in some areas. As mentors, we assist them with some of teaching skills and content knowledge for subjects like V. P. A. Student teachers search for information from the internet and get assistance from fellow student teachers. Student teachers lacked knowledge of use of e-learning which was a threat to their confidence. (Participant SMIN: R03).*

Another student teacher's mentor interviewed said:

*As a mentor, I help student teachers acquire the pedagogical content knowledge. There is need for induction of the student teachers on the teaching methods and the subject content. Student teachers developed self-confidence after acquiring the relevant teaching skills. (Participant SMIN: R04).*

One of the student teachers' mentors, in the interview, expressed her views as follows:

*Pedagogical content knowledge helped student teachers feel confident and made them tick. The updated curriculum has new subjects like V.P.A, which are interesting, and knowledge of these subjects motivated the student teachers to soldier on. More experience, new methods and teaching techniques were developed because of COVID-19 and this boosted the confidence of the student teachers however, for those who failed to master the new teaching technique, they felt embarrassed. (Participant SMIN: R05).*

In corroboration, one of the student teachers' mentors remarked:

*The Pedagogical knowledge removed timidity from the student teachers and they were sure that they are capable of meeting the lesson objectives. Student teachers mastered content knowledge with practice. When you have subject content, you will not be stuck in front of learners and you will be able to answer questions asked by the learners. If one knows the subject content, you are eager to teach the learners. (Participant SMIN: R06).*

Emerging of the above responses from focus group discussions and interview sessions is the view that pedagogical content knowledge boosted the confidence of student teachers on teaching practice in COVID-19 era. Results revealed that student teachers got assistance from mentors, school administrators and fellow student teachers in the development of pedagogical content knowledge because the college had not fully developed pedagogical content knowledge in the student teachers as the college failed to cover the syllabus due to early closures induced by COVID-19. Findings revealed that although mastery of pedagogical content knowledge promoted the resilience of student teachers, lack of technological pedagogical content knowledge was a threat to the resilience of student teachers on teaching practice in COVID-19 era.

#### **4.5.2 Sub-theme 3.2: Relational resilience as contextual resource**

The majority of student teachers' mentors and student teachers who participated in this study explained the importance of relational resilience as a contextual resource that promotes resilience in student teachers on teaching practice in COVID-19 era. Most of the participants revealed that relationships which are genuine and nonjudgmental were key to the development of resilience of student teachers on teaching practice in COVID-19 era. Data generated through focus group discussions and interviews identified important relationships which contributed to resilient outcomes in student teachers on teaching practice in COVID-19 era. The identified patterns of relationships are as follows; student teacher-school administration relationships, student teacher-student teachers' mentor relationships, student teacher-student teacher relationships, student teacher-college lecturers' relationships, student teacher-learners' relationships and student teacher-community relationships. The majority of the participants described the nature and influence of the patterns of relationships listed above on the resilience of student teachers on teaching practice in COVID-19 era.

#### 4.5.2.1 Student teacher-School Administration relationship

When responding to the question on the influence of relationships, one of the student teachers, in the focus group discussion, expressed his views as follows:

*Relationship was good and duties shared without discrimination. My mentor sanitized learners while I teach and update class records. Stationery was provided by the school administration, but the problem is that some student teachers were lazy and could not write charts or update their records. (Participant FGD1:P04).*

According to Participant FGD2:P14:

*The administration provided us with sanitizers, masks and some incentives. At one time we were given \$10 USD each student teacher for taking part in the community Agricultural Show.*

Depicted in Participant FGD3:P15's words:

*Head and the deputy head relied on student teachers as we were always at work teaching the learners and as result, they were polite and friendly to us. The school administrators accorded us time to conduct school assemblies which boosted our sense of self worthy.*

When responding to the same question, one of the student teachers' mentors, in the interview, expressed her views as follows:

*Due to good relationships, the school administration will be very willing to help students solve challenges and assist student teachers in chart making, planning, lesson presentation and classroom organization. School administration holds counseling sessions with the student's teachers to try to solve social and professional challenges encountered by the student teachers. (Participant SMIN: R01).*

Furthermore SMIN: R05 claimed that:

*Sound relationships with the school administration boosts confidence of the student teacher making him more effective in teaching knowing that he/she has support. School administrators made students want to remain at the school and felt they were liked and are part of the teaching staff. The good relationship motivated them to work hard.*

Another student teachers mentor added that:

*Student teachers stand to benefit a lot from good relationships with the school administration. They were given stationery, good accommodation, sanitizers and masks. The working environment was very conducive and student teachers happy and worked very hard (Participant SMIN: R04).*

The above verbatim quotes seem to suggest that student-teacher- school administration relationships are vital in the promotion of resilience of student teachers on teaching practice in COVID-19 era. Data show that most administrators had professional and friendly relationships with student teachers as they gave professional advice and advice on how to curb the spread of the COVID-19 pandemic. School administrators supervised student teachers and gave constructive feedback and they also encouraged student teachers to be vaccinated against COVID-19.

#### **4.5.2.2 Student teacher-mentor relationship**

Answering a similar question on relationships, another student teacher, during a focus group discussion, expressed her sentiments as follows:

*My first mentor was very helpful but it's sad that she lost her life due to COVID-19. However, the second male mentor had a negative attitude towards me and always reported me to the head that I was not capable of teaching. (Participant SMIN: R04).*

Another student teacher added this:

*My mentor was polite and corrected my errors in a diplomatic and professional way however the mentor left me to mark all the written work which gave me a lot of pressure due to too much work. (Participant FGD2:P10).*

Furthermore, Participant FGD2:P10 said:

*For me it was quite amazing as the mentor was very helpful and taught me record keeping, classroom management and lesson presentation which helped me in obtaining a distinction in teaching practice. The mentor even gave me food to eat during break and lunch time. The mentor gave me a lot of help on professional and social issues.*

In corroboration another student teacher remarked:

*The mentor was so friendly and helped a lot in record keeping and teaching techniques and I ended up obtaining a distinction. My mentor always assisted me with lesson planning and teaching techniques and helped me socially through advices and prayers. (Participant FGD3:P19).*

When responding to the question on the influence of relationships, one of the student teachers, in the interview, expressed her views as follows:

*My mentor was my pillar of strength because she was always there for me and I always feel sad whenever I think of my late mentor who succumbed to COVID-19. She treated me like her own daughter. She supervised my records every time and corrected me politely whenever I made a mistake. (Participant STIN: R03).*

Another student teacher postulated that:

*My mentor was my pillar of strength because she was always there for me and I always feel sad whenever I think of my late mentor who succumbed to COVID-19. She treated me like her own daughter. She supervised my records every time and corrected me politely whenever I made a mistake. (Participant STIN: R03)*

One of the student teachers posited that:

*Due to good relationships the mentor helped me with manila sheets and assisted me on lesson presentation. My mentor treated me with respect and was there for me. (Participant STIN: R06).*

During the interview session, one of the student teachers' mentors expressed her views as follows:

*In most cases, mentors render financial assistance, provide food, manila sheets, and supervise record books due to good working relationships. The assistance reduces stress promoting mental health. (Participant SMIN: R04).*

One of the student teachers' mentors expressed his sentiments as follows:

*The mentor-student-teacher relationship is the most important relationship as the mentor is always with the student teachers. Mentor is the chief advisor of the student teacher. Student teacher learns from the mentor and I feel a mentor is more important than the lecturers are. Constructive advice from the mentor helps the student teacher develop teachings which leads to job satisfaction. (Participant SMIN: R05).*

The above quotes revealed that student-teacher- student teachers' mentor relationships were very influential in promoting the resilience of student teachers in COVID-19 era. Results show that student teachers' mentors were a pillar of strength to the student teachers as most of the student teachers' mentors were sociable, approachable, friendly and helpful however in very few cases some mentors were not friendly, disrespectful and looked down upon student teachers. Assistance and the cordial relationships between the student teachers and student teachers' mentors boosted the teaching competencies, self-esteem and psychological well-being of the student teachers.

#### **4.5.2.3 Student teacher-student teacher relationship**

When responding to the question on the influence of relationships, one of the student teachers, in the focus group discussion, expressed her views as follows:

*We helped each other on how to prepare media lesson planning and lesson presentation. We shared media and all the student teachers were cooperative. Team work helped us to solve the challenges were encountered on teaching practice in COVID-19 era. (Participant FGD3:P16).*

Another student teacher echoed her views as follows:

*As student teachers we contributed some bereavement money when one of us was bereaved. We shared food items; we had sound relationships which made problem*

*solving easier. Emotionally were attached as student teachers and there was peace of mind. (Participant FGD3:P19).*

Another student teacher added that:

*We organized prayer sessions as a group of student teachers. There was team spirit and unity among the student teachers. We were in good books and we worked as a family. Prayers raised our hopes and emotional support which gave us a sense of security in these trying time of COVID-19. (Participant FGD3:P20).*

During an interview session, one of the student teachers reiterated that:

*As student teachers we used to meet and discuss challenges which we encountered and suggested solutions to the problems. My colleagues gave me information on when lecturers will visit us for supervision. As student teachers we corrected each other's errors in teaching and record keeping. (Participant STIN: R02).*

Another student teacher explained that:

*As student teachers, we worked as a team and helped each especially on planning and media making. We visited each other's classroom and helped each other to improve classroom appearance. We became committed to our job such that our marks improved highly. (Participant STIN: R05).*

One of the student teachers postulated that:

*Fellow students we were in good books helped me update charts, learning centres and planning, as student teachers we planned as a group and assisted one another on stating behavioral objective and detailed lesson steps. As student teachers we freely shared ideas, shared media and inspected each other classroom, we worked as a team. (Participant STIN: R09).*

During the interview, one the student teachers' mentors said:

*Fellow student teachers share different ideas and learn from one another. They assist one another financially, socially and professionally. My student teacher did not know how to*

*write the reading record book and got assistance from fellow student teachers. (Participant SMIN: R03).*

Emerging from the above responses from student teachers' mentors and student teachers is the view that student teachers were in good books. Results show that the sound relationships among the student teachers gave them emotional support, unity and commitment to duty. Most student teachers were very cooperative and shared ideas on how to protect each other against COVID-19 pandemic except for very few who were not sociable, selfish and jealous of other student teachers who chose to befriend qualified teachers.

#### **4.5.2.4 Student teacher-college lecturers' relationship**

When responding to the question on the influence of relationships, one of the student teachers, in the focus group discussion, expressed her views as follows:

*The first time I was supervised, the lecturer was tough on me and confusing. She had a negative attitude towards me, however the on the third supervision I was supervised by a lecturer who was very professional, polite and helped me which boosted my self-esteem. (Participant FGD2:P12).*

Another participant added this:

*My second supervision was done by a lecturer who was considerate and friendly that gave me time to settle down and prepare my work, I taught without fear and did my very best with all the confidence. (Participant FGD2:P13).*

One of the participants expressed her sentiments as follows:

*After supervision by lecturers, we held group discussions with the lecturers and we benefited a lot. College lecturers were very profession and gave constructive criticism. The lecturers corrected me politely and gave me fruitful advice on how to teach learners. College lecturers were very polite and helped me improve on record keeping and lesson execution. My confidence grew and I felt satisfied with my teaching skills. (Participant FGD3:P16).*

Responding to a similar question, one of the student teachers, in the interview remarked:

*We held meetings with lecturers and say out our challenges and they gave us solutions they really encouraged us to carry on with teaching practice in the COVID-19 era. College lecturers gave constructive ideas and their positive comments gave me a sense of pride. (Participant STIN: R02).*

Another student teacher added:

*College lecturers gave me encouraging comments. Lecturers had to send handouts and audio notes on WhatsApp on how to use teaching methods which did not spread COVID-19. The lectures were so friendly, encouraging and helpful. (Participant STIN: R03).*

One of the student teachers posited:

*Lecturers were so friendly and helped by giving me advice on how to improve record keeping and lesson delivery in line with COVID-19 protocols. They highlighted areas to improve in a polite way. However very few were not friendly and were harsh. (Participant STIN: R05).*

During the interview, one of the student teachers' mentors expressed her sentiments as follows:

*There were good relationships between the lecturers and student teachers so student teachers benefited a lot through proper professional guidance. The majority of the student teachers progressed very well with the course some of them obtained distinctions in teaching practice despite the challenges caused by COVID-19. (Participant SMIN: R06).*

*The relationship between the lecturers and the student teachers has to be sound since lecturers are there to advice student teachers on how to teach and keep class records correctly. Lecturers offered advice on how to improve teaching competences, give advice on record keeping and lesson presentation using methods that did not spread COVID-19 as a result the student teachers developed the zeal to work hard and excel. (Participant SMIN: R05).*

Findings showed that in most cases there was very good rapport between the student teachers and college lecturers which boosted most of the student teachers' self-confidence, motivation, self-efficacy and job satisfaction. Most of the college lectures respected student teachers and gave constructive feedback soon after supervision in a professional matter and also encouraged the student teachers to protect themselves and the learners against COVID-19. However, a few participants showed that some college lecturers were impatient, harsh, and disrespectful as some of the scolded student teachers in front of the student teacher's mentor and the learners. Data showed that most lecturers advised on how to improve teaching competences, advice on record keeping and lesson presentation using methods that did not spread COVID-19, as a result, the student teachers developed the zeal to work hard and excel.

#### **4.5.2.5 Student teacher-learners' relationship**

When responding to the question on the influence of relationships, one of the student teachers, in the focus group discussion, expressed his views as follows:

*There was no favoritism and I treated learners with respect so learners felt accepted and participated highly this promoted friendly relationships between learners and me. I really enjoyed the good relationship with the learners to an extent that they brought me presents on my birthday e.g., bananas, groundnuts. (Participant FGD1:P07).*

Another student teacher added that:

*Learners in my class volunteered to carry books, rub the chalkboard and fetch water for me and they participated actively during supervision by lecturers or school supervision to help me score high marks. I really enjoyed good times with the learners and learners were afraid of the mentor and ended up being friendly to me. (Participant FGD2:P11).*

One of the student teachers explained that:

*Most of the learners were friendly except one boy who was stubborn and always fought other in class. There was a very good relationship and the learners actively participated especially in the presence of supervisors. We were real companions. Learners were so*

*cooperative that I did not have problems enforcing the COVID-19 regulations. (Participant FGD3:P17).*

In corroboration, another student teacher remarked:

*The learners were so helpful and were keen to assist by cleaning the classroom, arranging books and setting up indoor learning centres. For me the relationship was very good, and learners wanted me to mark their books instead of the mentor. (Participant FGD3:P21).*

During an interview session, one of the student teachers air out her sentiments as follows:

*My class was a mixed bag as some learners were cooperative and friendly while a few bullied others and others were disrespectful. Those who were cooperative helped in classroom management i.e., arranging and displaying charts and setting up learning centres and this boosted my confidence and attachment to the class. (Participant STIN: R05).*

During the interview session, one of the student teachers' mentors said that:

*Learning took place easily because there was good relationship between the student teacher and the learners. If there is a good relationship learners behave well and the lessons will be a success. Due to sound relationships, most learners become disciplined and helped the student teacher pass by giving the student teacher items to display in the learning centres and through active participation during supervision. (Participant SMIN: R03).*

Another student teachers' mentor reported that:

*Learners will respect, obey and minimizes misbehaviors and absenteeism because of good relationships with the student teacher that boost their interest to learn. Good relationships reduced stress on the part of the teacher. (Participant SMIN: R04).*

One of the student teachers' mentors interviewed added that:

*The good relationship between student teachers and learners made learners develop interest in schooling, behave well and participate actively in class which boosted the student teachers' self-esteem and teaching competencies. (Participant SMIN: R05).*

The majority of the participants pointed out that most learners were helpful, friendly, disciplined and cooperative except for a few boys who misbehaved. Data showed that due to good relationships, most learners participated actively, especially when the student teacher was being supervised so as to help their teacher score high marks. The sound relationships between the student teachers and most of the learners developed self-efficacy in student teachers which boosted their job satisfaction.

#### **4.5.2.6 Student teacher-community relationships**

When responding to the question on the influence of relationships, one of the student teachers, in the focus group discussion, expressed her views as follows:

*Community helped student teachers; they gave student teachers first priority to fetch water so that they can quickly go to work. We felt that we were valued by the community which gave us a sense of self-worth. Most parents were happy that student teachers were teaching during COVID-19 and their children were benefiting so the parents were very friendly and helpful. (Participant FGD1:P01).*

Depicted in FGD2:P11's words:

*My relationship with the community was good since some parents attended parents' days and consultation days however a few parents did not value education of their children and refused even to buy exercise books and ball point pens for their children which made life difficult for me.*

Another student teacher added that:

*The parents respected the student teachers since they had realized that the mentors were always absent from duty and that the student teachers taught their children though they risked contracting COVID-19. The parents brought vegetables, tomatoes and sweet potatoes for us. The relationship was sound and it boosted our self-esteem. (Participant FGD2:P13).*

One of the student teachers remarked that:

*Parents provided us with food and were so friendly and during consultation days politely asked the student teachers to help their children improve their performance. Parents gave us fruits and vegetables for free. The community invited us to attend functions like field days so our relationship was cordial. We attended funeral services in the community so the relationship was so good. (Participant FGD2:P14).*

Another participant expressed his sentiments as follows:

*The community members worked at the school for free, fencing the school to protect us and the classrooms. Parents were very cooperative and provided learners with books and masks. Community members respected us very much and were so friendly, we felt that we were home away from home. (Participant FGD3:P20).*

To corroborate this, another informant remarked:

*Though most community members were friendly a few boys from the community were disrespectful and they formed gangs to threaten us because we were foreigners in the area. I had cordial relationships with the community and most parents used to telephone me discussing issues to do with their children learning. I really enjoyed my stay at the school. (Participant FGD3:P17).*

During the interview one of the student teachers posited that:

*Parents from the community were always cooperative and visited me at the school and gave me food staffs like tomatoes and vegetables. I had cordial relationships the community and most parents used to telephone me discussing issues to do with their children learning. (Participant STIN: R02).*

Another student teacher had this to say:

*Community health workers taught us a lot about prevention of COVID-19. Parents from the community respected student teachers and gave us tomatoes and vegetables for free. Most of the parents were very cooperative and provided the learners with stationery and masks*

*STIN: R03. Parents from the community appreciated our work and donated maize meal to us and provided masks to learners. (Participant STIN: R08).*

During the interview, one of the student teachers' mentors echoed her sentiments as follows:

*Community members have the powers to send the student teachers away from their school if relationships are bad but when relationships are sound, the community members will give the student teachers food stuffs. Parents provided masks for learners and stationery, they were very cooperative and student teachers enjoyed the cordial relationships. (Participant SMIN: R04).*

Another student teachers' mentor interviewed added that:

*We live in a community so community provides us with security. Good relationships with the community made work enjoyable and student teachers always wanted to remain working at the school. (Participant SMIN: R06).*

The results seem to suggest that most parents from the community were very supportive of the student teachers, cooperative, friendly and respectful because student teachers sacrificed to teach the learners though there was an outbreak of COVID-19. Findings show that the parents from the community cooperated by providing learners with stationery and masks. In most cases, parents from the community gave student teachers the first preference to fetch water from the boreholes. Most student teachers were happy to be respected by members of the community which boosted their feelings of being accepted and loved by the community members.

#### **4.5.3 Sub-theme 3.3: Coping strategies**

In this section of the study, the researcher, reports on resilience strategies employed by student teachers in COVID-19 era. Results from the study revealed that student teachers in COVID-19 era employed several coping strategies to manage the demands of stressful situations caused by the outbreak of COVID-19. It emerged from the study that student teachers engaged in help-seeking behaviors, problems solving, social networking and accepting the realities of the COVID-19 situation and lived positively. To substantiate these findings, one of the student teachers, in an interview said:

*I accepted that the situation was the supreme command and I developed problem solving skills taking the advice given by fellow student teachers and the mentor. I socialized a lot with the fellow student teachers and the learners, a sense of humour made me to forget all the challenges I faced. (Participant STIN: R03).*

Another student teacher interviewed had this to say:

*I solved each problem as I came across it with the help of my mentor who really was my pillar of strength. I was very committed to my work and enjoyed teaching the learners. I acquired teaching techniques from the mentor and school head, I was very motivated, and become very confident. I felt a sense of achievement. (Participant STIN: R05).*

One of the student teachers postulated that:

*I relied on my fellow student teachers for advice on how to solve teaching practice challenges imposed by COVID-19. I prayed on daily basis but at times I had to communicate with my friends and relatives. (Participant STIN: R07).*

In the interview, participant STIN: R10 said:

*I always asked for help from my colleagues and my family members. I researched a lot and wrote notes on subject content and this boosted my confidence. Through social media I got a lot of information on how to protect myself and the learners against COVID-19 which gave me a lot of hope.*

Another student teacher explained that:

*Being friendly to the qualified teachers, the learners and fellow student teachers gave me the impetus to do my work under the COVID-19 situation. I realized that I was not alone in the COVID-19 pandemic. I concentrated on my work and had to seek from help from fellow student teachers and my mentor. I sort advice from School Head or mentor whenever I faced with challenges. (Participant STIN: R07).*

In corroboration, one of the student teachers remarked:

*I used to pray and after the prayer the problem was half solved. I shared my problems with the mentors and fellow student teachers and they provided me with solutions. Seeking for help from fellow student teachers and the mentor worked very well for me. I could share and discuss my problems with my colleagues. (Participant STIN: R02).*

When responding to the question on resilience strategies used by student teachers on teaching practice in COVID-19 era, one of the student teachers' mentors, in the interview, expressed her views as follows:

*Coping Strategies such as assisting one another, asking for help from the mentor and accepting the situation helped student teachers to continue working. Sharing their challenges with the mentor, school administration and fellow students helped student teachers solve their challenges. (Participant SMIN: R03).*

Participant SMIN: R04 acknowledged that:

*Student teachers seek advice from their mentors or school administration whenever they face challenges. Student teachers in some cases they assist each other as student teachers. They also get help from the mentors on planning and affective use of media.*

In corroboration one of the student teachers' mentors remarked;

*When student teachers encounter challenges they discuss the problems with the mentors, fellow student teachers, parents, or the school administration. They always seek advice from the mentors, school administration, the parents in the community and lecturers. (Participant SMIN: R05).*

When responding to the question on resilience strategies used by student teachers on teaching practice in COVID-19 era, one of the student teachers, in the focus group discussion, expressed her views as follows:

*I got assistance from the mentor as she had vast experience in teaching and gave alternative and effective solutions to the problems I faced as a student teacher on teaching practice during the COVID-19 era. Whenever I face problems, I cried so as to relieve myself. I did some indoor physical exercises. (Participant FGD3:P21).*

Another informant said:

*Working hard helped me to improve and excel as a result I obtained distinctions in teaching practice. I resolved to stay alone and not join clicks which could create conflicts at the school. But had to seek help from my mentor and the strategy worked very well. I just accepted the hard times and carried on with my work. (Participant FGD2:P09).*

One of the student teachers expressed her sentiments as follows:

*I had to seek help from my mentor and the strategy worked very well. I asked for power, wisdom and protection from God through prayer and fasting. Accepted positive criticism from the mentor or other supervisors. (Participant FGD2:P12).*

The above quotes seem to suggest that student teachers on teaching practice in COVID-19 era employed resilience strategies to cope with the teaching practice challenges induced by the outbreak of the COVID-19 pandemic. Results show that student teachers used behavioral coping strategies and social networking strategies to buffer themselves against the negative demands imposed by the COVID-19 pandemic. Data showed that the student teachers used coping strategies such as help and advice seeking, concentrating on their work, discussing their challenges with colleagues, accepting the COVID-19 situation and setting achievable goals. It emerged from this research study that resilience strategies enabled the student teachers on teaching practice in the COVID-19 era to endure the hardships caused by COVID-19 and remain resilient.

#### **4.5.4 Discussions of Findings of Theme 3**

The third theme that emerged from the focus group discussions and semi-structured interviews was on personal and contextual resources that contribute to resilient outcomes in student teachers on teaching practice in COVID-19 era. The participants felt that emotions, motivation, self-efficacy, social competence, pedagogical content knowledge, relational relationships and coping strategies were some of the resources which promoted the resilience of student teachers on teaching practice in COVID-19 era.

#### **4.5.4.1 Personal resources**

The results from this study showed that while there are, a number of risk factors that hinder the resilience of student teachers during COVID-19 pandemic, research also points to a number of protective factors that help teachers overcome the risks and meet the challenges of teaching (Poyner, 2016). It emerged from this study that personal protective factors such as emotions, motivation, self-efficacy, social competence and pedagogical content knowledge promote the resilience of student teachers during COVID-19 pandemic. Furthermore, data indicated that relational resilience and coping strategies employed by student teachers in COVID-19 era cultivated their resilience. The findings are in line with those by Greenfield (2016) who argue that despite the differences in individuals and the work environment, it is possible to determine the presence of certain situated factors that can positively contribute to the commitment and resilience of student teachers.

The findings from this study corroborate Valenzuela *et al.*, (2019) who claimed that protective factors that prevent teacher distress include having a strong occupational call by accumulating numerous reasons for choosing the teaching profession (for example, intrinsic, altruistic and extrinsic reasons and relatedly, having a strong motivation to teach by valuing the teaching profession (e.g., in terms of extrinsic, altruistic and extrinsic benefits (Valenzuela, et al., 2019). It emerged from the findings of this study that the majority of student teachers were motivated by the zeal to complete the course, passion for the job and empathy towards educating the young learners. Furthermore, research findings revealed that the need to obtain a diploma in education certificate and words of encouragement from college lecturers, student teachers' mentor, and family members gave the student teachers the impetus to carry on with teaching practice in COVID-19 era. Additionally, findings showed that being vaccinated against COVID-19 boosted the motivation of the student teachers as they now had renewed hope for survival. These findings corroborate several research studies which revealed that occupational resources also include social support from supervisors, student teachers' mentors, family members and friends during teaching practice (e.g., teaching advice, emotional and organizational support (Paquette and Rieg, 2016; Stanulis *et al.*, 2018) and being hopeful about the teaching career by expecting positive outcomes on the job (McIlveen and Perera, 2016).

Results from this study established that though most student teachers were worried and anxious about the COVID-19 pandemic, the majority of student teachers employed strategies such as; teamwork, seeking advice, socialization, praying, fasting, singing, dancing, taking a walk, playing games on smartphones, and communicating through social media platforms, for example, WhatsApp and Facebook to promote emotional wellbeing. It further emerged from this study that most of the student teachers accepted the COVID-19 situation they found themselves in and lived positively with the COVID-19 situation and the majority of them were vaccinated against COVID-19 virus to boost their safety and emotional well-being. These findings were substantiated by Mansfield, *et al.*, 2016) who claim that internationally, there is a shared thinking amongst academics that particular personal resources (e.g., motivation, social and emotional competence) and use of coping strategies (e.g., problem-solving, goal setting, maintaining work-life balance) enable teachers to demonstrate resilience. The results of this study also correspond with Day's (2014) findings that personal resources associated with emotions such as academic optimism enable school cultures and resilient principles. Additionally, the results of this study resonate with other scholars (Gebbie *et al.*, 2012) who posit that humour can also relieve stress and burnout and contributes to resilience.

This study's findings are consistent with Bandura's 1997 theory of self-efficacy. It emerged from the current study that although at the beginning of teaching practice most student teachers' self-efficacy was low due to a lack of teaching techniques and anxiety caused by COVID-19, through encouragement, persuasion and support from the student teachers' mentors, the school administrators, colleagues, family members and friends the student teachers believed in their abilities to teach and to protect themselves and the learners against the COVID-19 virus. The findings concur with those of the 2018 Teaching and Learning International Survey (TALIS, 2018; OECD, 2019) which reported a positive association between the teacher self-efficacy of in-service teachers and a range of personal and environmental factors including working with more experienced teachers and professional collaboration. Data revealed that most student teachers developed a sense of belief in their abilities which enabled them to thrive amidst a host of challenges brought about by the outbreak of the COVID-19 pandemic. Bandura (1997) in Baroud, *et al.*, (2022) further remarked that self-efficacy is influenced by fundamental factors, such as mastery experience, vicarious experience, and verbal persuasion impact individuals' self-efficacy, findings which corroborate the findings of this study. The findings of this study showed

that student teachers eventually mastered teaching techniques as a result of verbal persuasion from colleagues and vicarious learning as student teachers' mentors acted as role models. This view is also corroborated by Symes, *et al.*, (2023) who posit that opportunities to work with and learn from other teachers have also been linked to the development of teacher self-efficacy in student teachers.

It further emerged from this study that self-efficacy helped student teachers perfect their teaching skills, record-keeping skills and class/classroom management skills which boosted their self-esteem and intrinsically motivated student teachers to continue with teaching practice in COVID-19 era. The findings of this study allude to similar views from studies from several scholars who indicated that self-efficacy for instructional strategies (Lazarides and Schiefele, 2021) and self-efficacy for student engagement (Fackler, *et al.*, 2021) and self-efficacy for classroom management (Dicke, *et al.*, 2014; Lazarides, *et al.* 2020) positively relate to indicators of effective teaching in pre-service teachers. It emerged from this study that student teachers managed to master the teaching techniques and methodologies which adhered to COVID-19 protocols, were in a position to control their classes and manage their classrooms in the new normal in line with COVID-19 regulations which gave them a feeling that they were now expert teachers. Results from this study are consistent with Renner & Pratt (2017) who argue from the New Zealand context that self-efficacy beliefs play a significant role in teachers' effectiveness and overall satisfaction and comfortability in doing their jobs. However, results are inconsistent with a comparative study by Pressley, Ha & learn (2021) who surveyed 361 in-service teachers during the COVID-19 pandemic, and found that, in general teachers reported lower levels of self-efficacy for instructional strategies and student management than in previous studies.

The results of this study seem to corroborate with a common agreement among researchers that teachers who are socially and emotionally competent are aware of and are able to maintain their full range of emotions (Mansfield *et al.*, 2014) because such individuals tend to be pro-social and know how to create and maintain relationships with others (Bullock *et al.*, 2015). It emerged from the study that findings most of the student teachers were outgoing despite the COVID-19 restrictions, the majority of student teachers were able to safely socialize with fellow student teachers, the student teachers' mentors and the learners, where possible they used also social

media platforms such as WhatsApp to reach out to family members and their friends., however, a few student teachers were reserved and therefore not sociable. Participants in this study revealed that student teachers freely asked for help, helped others as well and shared ideas with colleagues, student teachers' mentors, family members and friends, however they observed the COVID-19 protocols in their interactions. In line with the above findings Klassen, Perry & Frenzel, (2018) reported that socially and emotionally competent student teachers do not mask emotions, rather they demonstrate healthy strategies when responding to less-than-ideal circumstances. Findings are consistent with research findings by Le-Comu, (2013) which revealed that hope, courage, empathy, and social and emotional competence are protective factors that promote resilience in student teachers. As indicated by participants in this study most socially competent student teachers managed to maintain their social competence, made friends and maintained a home-life balance which increased their psychological well-being and job satisfaction during COVID-19. The results of this current study resonate with Boyd (2013) who established that creating a balance between home and school contributes to physical and emotional well-being away from school, which in turn contributes to increased job satisfaction even under adverse conditions.

This study's findings are consistent with Jordan's (2006) study which cites empowerment as one of the building blocks of 'growth-fostering connections' which enable individuals to experience energy, creativity and flexibility. It emerged from this current study that pedagogical content knowledge boosted the confidence of student teachers on teaching practice in COVID-19 era. Data revealed that student teachers got assistance from the student teachers' mentors and the school administrators in the development of pedagogical content knowledge because the college had not fully developed pedagogical content knowledge in the student teachers as the college failed to cover the syllabus due to early closures induced by COVID-19. Findings further revealed that although mastery of pedagogical content knowledge promoted the resilience of student teachers, lack of technological pedagogical content knowledge was a threat to the resilience of student teachers on teaching practice in COVID-19 era. Findings of this study concur with the results of the study by Front Psychol (2022) which established that technological pedagogical content knowledge should emphasize online teaching readiness of student teachers so that they are well equipped with online pedagogical knowledge for effective teaching and learning. This view is also corroborated by UNESCO (2020) which reported that online

education lacks quality because student teachers are unprepared for online pedagogical knowledge.

#### **4.5.4.2 Relational resilience as a contextual resource**

The findings of this study allude to similar views as those by Le Cornu (2013) who through citing Jordan's model of relational resilience, opined that strengthening relationships is critical for enhancing resilience, especially in early career teachers. It emerged from this study that relational resilience is informed through a web of strong and trusting relationships between student teachers-school administrators, student teachers-student teachers' mentors, student teachers-student teachers, student teachers-college lecturers, student teachers-learners and student teachers- community. Data revealed that these cordial relationships were very crucial for the development of resilience of the student teachers especially in the face of the COVID-19 pandemic. This view is also corroborated by other scholars (Day and Gu, 2014; Gu, 2014) who (Day and Gu, 2014; Gu, 2014) who emphasize the importance of mutual empowerment, growth and support at the centre of the resilience process. Furthermore, Ebersohn's (2014) study, in line with the findings of this study, used the term Relationship Resourced Resilience (RRR) to emphasize that resilience occurs as a collective process whereby individuals 'flock' together to access, mobilize and share resources for positive adaptation in adverse conditions.

This study's findings are consistent with Maief-Hoifer's (2015) study which established that apart from administrative support, relationships were particularly helpful in assisting student teachers navigate challenging situations and problem solving. Revelations in this study showed that student teacher-school administration relationships were vital in the promotion of resilience of student teachers on teaching practice in COVID-19 era. Data show that most administrators had professional and friendly relationships with student teachers as they gave professional advice, recognized student teachers as staff members, invited them to attend staff meetings, gave them duties and responsibilities and gave them some incentives in recognition of a job well done. It further emerged that school administrators supervised student teachers and gave constructive feedback. This view is also corroborated by other scholars (Gu, 2017) who pointed out that the sense of purpose and commitment results from a reappraisal of their role in ways that allow them to be encouraged and strengthened to become resilient in their profession. The results of this

study concur with Gu, (2014) who asserts that researchers acknowledge that elements of trust, autonomy, collegiality and leadership are critical to resilience-promoting school cultures.

The findings of this study resonated with an earlier study by Mansfield, Beltman and Price (2014), who posit that although there were variations in the quality of mentors, positive relationships with mentors have been shown to influence early career teachers' efficacy, job satisfaction, and identity. It emerged from this study that student teachers' mentors were a pillar of strength to the student teachers as they gave unconditional professional assistance and emotional support during COVID-19 pandemic. Research findings showed that there existed cordial relationships between the student teachers and student teachers' mentors which boosted the teaching competencies, self-esteem and psychological well-being of the student teachers. The findings of this study are commensurate with a study by Keogh, Garvis, and Prendergast, (2012) who pointed out that sound relationships as well as emotional support have a buffering effect in times of challenge.

The results of this study concur with the findings of Bullough *et al.*, (2012) who asserted that colleagues are an important part of the mentoring process and often play an integral role in creating hope, boosting morale, and helping student teachers face challenges. Emerging from this study is the view that most student teachers were in good books, they shared ideas on record keeping, lesson execution, media and information on how to protect each other against COVID-19 including encouraging each other to get vaccinated against COVID-19. Results show that the sound relationships among the student teachers gave them emotional support, unity and commitment to duty during the trying times of the COVID-19 pandemic. Most student teachers were very cooperative and shared ideas on how to protect each other against COVID-19 pandemic which helped them to remain resilient during the teaching practice period. In line with the findings of this study Gu and Li (2013) maintained that "the nature and sustainability of resilience in student teachers is not innate but influenced by individual qualities in interaction with contextual influences.

Applying Bronfenbrenner's theory to research on resilience in children, Ungar (2012) and his colleagues argue that "it is children's interactions with multiple reciprocating systems, and it is the quality of those systems that account for most children's developmental success under negative stress" (Ungar, *et al.*, 2013). The same argument applies to the research on exploring

the resilience of student teachers on teaching practice in COVID-19 era. It emerged from this study that good rapport between the student teachers and college lecturers, student teachers and the learners, student teachers and the parents from the community, student teachers and the student teachers' mentors boosted the student teachers' self-confidence, motivation, self-efficacy, and satisfaction. The findings of this study allude to similar views as those by other scholars (Beltman, 2015; Day and Hong, 2016, Johnson, *et al.*, 2016) who claimed that literature on teacher resilience shows that the quality of the intellectual, social and organisational conditions in which student teachers work and the people with whom they work has significant impacts, positively or negatively, on their capacity to be committed, resilient and effective. It emerged from this study that most of the student teachers enjoyed positive relationships and support from the microsystem (school administrators, student teachers' mentors, learners, parents), the mesosystem (positive relationships with school administrators, student teachers' mentors, learners, parents), the exosystem (resources), and the macrosystem (health, education). Implicitly the interactions among these nested systems together with the changes influenced by the passage of time (the chronosystem) positively influenced the development of resilience in student teachers during COVID-19 pandemic. These findings confirm findings from a research study by Le Cornu (2013) which revealed that more often the teachers' friends and family members encouraged them and reaffirmed for them that they were capable and up to the challenge. To this end, the focus on the reciprocal interaction between the capacity of the student teacher and the quality of multiple reciprocating systems offers a better understanding on why many student teachers are able to sustain their commitment, resilience and effectiveness in a place called school under adverse conditions (Gu, 2014). This view aligns with Masten's (2014) description of the resilience process as involving "many systems within the individual as well as many other systems at different levels of function that are frequently interacting."

#### **4.5.4.3 Coping Strategies**

The results from this study resonate with Johnson, *et al.*, (2014) who established that collaborative problem solving as well as help seeking were noted as important for student teachers. Research findings revealed that student teachers used behavioral coping strategies and social networking strategies such as seeking advice, socializing, helping others, praying, setting realistic goals and concentrating on their work so as to buffer themselves against the negative demands imposed by the COVID-19 pandemic. Also, findings from this study concur with

Leroux and Theoret (2014) who claimed that engaging in ongoing professional learning is an important strategy for enhancing resilience especially if it responds to student teachers' interests, needs, and aspirations and involves reflection. It emerged from this study that despite of the COVID-19 pandemic student teachers concentrated on their work, had a passion for teaching and enjoyed teaching the learners. Data showed that most student teachers socialized with their parents, friends and colleagues through WhatsApp so they broke the physical barriers caused by the lockdowns and the COVID-19 pandemic. Findings revealed that most of the student teachers were able to control their emotions through, being humorous, sociable, praying, forming WhatsApp prayer groups, singing, dancing and some even crying to release bad emotions. Findings corroborate views from several scholars who established that strategies that promote positive emotions such as humour, which enable student teachers to endure negative emotions and gain a sense of emotional control (Doney, 2012). Similarly, Curry and O'Brien (2012) described humour as part of "creative wellness".

The results of this study corroborate the findings by Wiezer (2014) that being able to communicate effectively with parents, colleagues and the school community is an important strategy to promote resilience. It emerged from the study that student teachers engaged in help seeking behaviors, problem solving, social networking, being humorous, setting emotional boundaries, physical exercise, taking a walk and accepting the realities of the COVID-19 situation and lived positively. The results from this study resonate with the findings by Mansfield *et al.*, (2016) who posit that having clear boundaries enables teachers to feel secure, take risks and enable autonomy.

**4.6 Theme 4: Support student teachers receive on teaching practice in the COVID-19 era.**

**Table 4.6.1 gives an overview of Theme 4 and its sub-themes**

<b>Sub-theme 4.1: Contextual support</b>								<b>Sub-theme 4.2</b>
<b>Category 4.1.1</b>	<b>Category 4.1.2</b>	<b>Category 4.1.3</b>	<b>Category 4.1.4</b>	<b>Category 4.1.5</b>	<b>Category 4.1.6</b>	<b>Category 4.1.7</b>	<b>Category 4.8</b>	Developing capacity for resilience in student teachers
School administration	Student teachers' mentors	College lecturer	colleagues	Community	Family and friends	Social media	Donors	

**4.6.1 Sub-theme 4.1: Contextual support**

In this segment, the researcher reports on the support student teachers received from different stakeholders while on teaching practice in COVID-19 era. The majority of the participants identified several key stakeholders whose support cultivated the resilience of student teachers on teaching practice in COVID-19 era. Most participants who took part in this study were of the view that school administrators, student teachers' mentors, college lecturers, student teachers, family members, friends, members of the community, the donor community and social media played a vital supportive role in promoting resilience of student teachers on teaching practice in COVID-19 era. Most participants felt that student teachers received professional support, psychological support, social support, spiritual support as well as financial and material support from various stakeholders during COVID-19 pandemic. Most of the participants were of the idea that more could have been done on issues to do with health and measures to curb the COVID-19 pandemic. Participants felt that teacher education programs should include a resilience subject in their curriculum to promote the development of resilience in student teachers before they go out on teaching practice.

**4.6.1.1 School Administrators.**

It emerged from the study that most of the school administrators were approachable and played their supportive roles in different ways such as supervision and giving constructive advice on

professional issues and the COVID-19 pandemic. In support of the above view, one of the student teachers, during the focus group discussion, remarked:

*The school administration provided us with stationery since we could not afford to buy stationary because the government had ceased our teaching practice allowances due to the prolonged teaching practice period because of COVID-19. The Head and Deputy Head encouraged us to get vaccinated which raised our confidence as we felt protected. (Participant FGD1:P01).*

Another student teacher expressed his views as follows:

*The School Head and Deputy Head discouraged mentors from calling us names and looking down upon us as a result it boosted our confidence because the mentors and learners respected us. We felt that we were part of the teaching staff at the school. Every Tuesday the School Head supervise and stamp our records and indicated areas to improve which helped us to pass with distinctions. (Participant FGD2:P11)*

During the focus group discussion, one of the student teachers said:

*Our School Head had no time to supervise or guide us but we got help from the Teacher in Charge. The School Head did not even provide us with manila sheets and chalk. We had to buy manila sheets and chalk boxes. (Participant FGD2:P08).*

When responding to the question on support student teachers received on teaching practice in COVID-19 era, one of the student teachers' mentors, in the interview, expressed her views as follows:

*The school administration gave student teachers sanitizers, facemasks, liquid soap, and stationery to argument their merger allowances. This encouraged them to continue working hard. We treated student teachers with respect and made them feel that they are part of the teaching staff. Student teachers were involved in school activities like workshops, staff meetings and farewell parties for members who retire or transfer from the school. Record books are supervised every Tuesday. (Participant SMIN: R06).*

Another student teachers' mentor added that:

*The school administration provided masks, sanitizers and resources such as manila, glue, and markers to motivate the student teachers. They also demonstrated how teach using methods which did not spread COVID-19. (Participant SMIN: R02).*

The research results revealed that most school administrators offered vital support to student teachers on teaching practice in COVID-19 era. Results show that the majority of school administrators were concerned with the health of student teachers so they encouraged the student teachers to be vaccinated against COVID-19. Most participants showed that school administrators provided student teachers with masks, sanitizers and stationery though they were inadequate in some cases. The majority of the participants showed the school administrators were approachable, and friendly and offered professional, and social support to student teachers on teaching practice in COVID-19 era. Data showed that school administrators recognized and acknowledged the contribution by student teachers and in some cases gave them incentives. However, a few participants revealed that some of the school administrators had no time to supervise student teachers so as to help them master teaching techniques. The majority of the participants felt that professional, material and social support given to student teachers by school administrators promoted their resilience in the COVID-19 era.

#### **4.6.1.2 Student teachers' mentors and other qualified teachers**

When responding to the question on support student teachers received on teaching practice in COVID-19 era, one of the student teachers, in the focus group discussion, expressed her sentiments as follows:

*Mentors came into my classroom and write chalk board work, arranged books and coached me on lesson presentation just before the lecture came into my classroom to supervise me since I was shivering and had confusion. Their help boosted my confidence and I performed very well. Some of the qualified teachers actually volunteered to assist us on how to teach and also gave us notes on the new subjects introduced in the curriculum. (Participant FGD2:P13).*

Another informant remarked that:

*Some qualified teachers helped us design charts, collect media for us and on how record keeping was done and developed our teaching techniques which boosted our confidence.*

*Qualified teachers helped us on stating objectives and how to sequence lesson steps and effective use of media. (Participant FGD2:10).*

Another participant added this

*The mentor helped me a lot in acquiring teaching skills and also did counseling when I got stressed. My mentor was quite helpful as she assisted me in preparing media and demonstrated various teaching techniques to use during COVID-19 era. My mentor comforted me when I was bereaved. (Participant FGD3:P19).*

Furthermore, Participant FGD2:P14 said:

*The mentor was my pillar of strength both professionally and morally. She provided professional support and moral support whole heartedly which boosted my self-esteem and self-efficiency. I got maximum support from the mentor on how to write charts, record keeping and lesson presentation.*

One of the student teachers, in the focus group discussion, remarked:

*My mentor did not supervise me so one of the lecturers commented that I was blindly going through teaching practice as there was lack of guidance from the mentor. The mentor didn't want to mark exercise books which caused pressure on work. (Participant FGD3:P20).*

Answering a similar question on support student teachers receive on teaching practice in COVID-19 era, another student teacher, in the interview, said that:

*My mentor always assisted me in chart marking, chalk board skills, teaching skills and effectively use of media. She motivated me and encouraged me to continue with teaching practice in spite of the COVID-19pandemic. (Participant STIN: R01).*

One of the student teachers interviewed posited:

*The mentor demonstrated a variety of teaching techniques and record keeping and she prepared chalkboard work for me. The mentor always reminded learners to use COVID-19 protocols to protect oneself against COVID-19. (Participant STIN: R01).*

In addition, another student teacher, in the interview remarked:

*The mentor very supportive in helping me write charts, plan correctly and assisted on how teaching appropriately in line with COVID-19 STR10. I sort advice from School Head or mentor whenever I faced with challenges. (Participant STIN: R03).*

Another student teachers' mentor elaborated on the subject on support student teachers receive on teaching practice in COVID-19 era, during the interview as follows:

*Mentors checked student teachers' record books and asked them to correct any errors. Mentors taught student teachers class management skills and instilled confidence in the student teachers to boost their self-esteem. (Participant SMIN: R02).*

Another participant added that:

*Mentors provided the student teachers with manila sheets markets. Mentors discuss with the student on record keeping, classroom management and lesson presentation. I supervise the record books every Monday and help the student teacher correct errors and also give positive comments to boost his confidence. (Participant SMIN: R03).*

Another student teachers' mentor explained that:

*Qualified teachers have teaching experience and they help student teachers by giving the information on how to teach or on the subject content. As qualified teachers, we have different expertise in different subject areas so the experts help all the student teachers in their areas of expertise. (Participant SMIN: R06).*

In corroboration one of the student teachers' mentors remarked:

*Mentors help student teachers on how to scheme, plan, prepare media, subject content and classroom management. They help by disciplining the learners who misbehave. Records are supervised every Monday by the mentors, checking if the student teacher is doing the correct thing and counseling the student teachers if there are social problems. Provide food staffs such as vegetables, mealie-meal and tomatoes. I gave the student teacher attached to me a single bed to sleep on since she suffered from flue due to sleeping on the cold floor. (Participant SMIN: R06).*

The above quotes seem to suggest that mentors are one of the key stakeholders in providing professional, social and moral support to student teachers on teaching practice in COVID-19 era. Results show that the majority of mentors demonstrated and developed teaching competencies in student teachers on teaching practice. The student teachers' mentor demonstrated how to use teaching methods which did not spread COVID-19 and helped enforce COVID-19 regulations. Data showed that student teachers received masks, sanitizers, stationery, advice, counseling and food items from student teachers' mentors. Most of the participants were of the view that student teachers' mentors and qualified teachers gave student teachers social, moral and financial support wholeheartedly resulting in the promotion of resilient outcomes in student teachers on teaching practice in COVID-19 era.

#### **4.6.1.3 Fellow student teachers**

When responding to the question on support student teachers receive on teaching practice in COVID-19 era, one of the student teachers, in the focus group discussion, expressed his sentiments as follows:

*The senior student teachers, that is, Intake 24 student teachers taught us a number of teaching techniques, for example, use of media, planning, evaluation, and how to use different teaching methods in line with COVID-19 protocols. (Participant FGD1:P06).*

One of the student teachers added this:

*We worked as a team correcting one another's mistakes in the teaching practice documents or on writing charts using the recommended handwriting, that is, Nelson Script Handwriting. We sat as a group in one classroom and helped each other with planning and evaluation. However, one of us did not want to cooperate with us so we could not share ideas with her. (Participant FGD1:P01).*

Another student teacher postulated:

*Teaching practice supervision was stressful but we shared media and advice on lesson preparation and delivery which made our work easier. We shared ideas on scheming, planning, classroom management and lesson presentation and also media use. We*

*prayed as a group and gave each other social support which helped us soldier on with teaching practice. (Participant FGD2:P08).*

Another student teacher echoed her views as follows:

*We shared ideas on scheming, planning, classroom management and lesson presentation. As student teachers we discussed safe teaching methods to use in the COVID-19 era. We helped each other on best classroom set up in adherence to COVID-19 regulations. As a group we took turns to inspect each other's record books to correct the identified mistakes. (Participant FGD2:P10).*

Another student teacher explained that:

*There were divisions among the student teachers and we ended up having two groups which did not cooperate with each other. There was a lot of gossip which caused conflict among us as student teachers. (Participant FGD3:P21).*

Answering a similar question on support student teachers receive on teaching practice in COVID-19 era, another student teacher, in the interview, expressed her sentiments as follows:

*My fellow student teachers highlighted my strengths and weaknesses after supervision and gave me advice on how to rectify the errors. I got a lot of information on how to protect myself against COVID-19 from my colleagues. Fellow student teachers gave me stationery whenever things were hard for me, that is, without money to buy stationery. (Participant STIN: R01).*

In corroboration on of the student teacher remarked:

*As colleagues we shared ideas and exchanged notes on how to teach, make media and maintain class records in line with the COVID-19 protocols. Fellow student teachers hold prayers together, compare their work and assist each other on how to improve our teaching skills. (Participant SMIN: R05).*

It emerged from the research findings that in most cases student teachers gave each other genuine support to soldier on with teaching practice in COVID-19 era. The majority of student teachers were very cooperative and shared ideas on record keeping, lesson execution, and how to

adhere to COVID-19 regulations. Data showed that student teachers shared information, ideas, media, food items, gave each other advice on social, professional and health matters especially related to COVID-19 pandemic. The majority of the student teachers did the team work on classroom management that is making and displaying charts and concrete media and setting up learning centres. Most student teachers provided fellow student teachers with professional, moral, social and financial support. However, results also show that very few student teachers were not cooperative, they were selfish and reserved. Research findings are suggestive of the view that support from fellow student teachers is vital in keeping student teachers soldiering on with teaching practice in COVID-19 era.

#### **4.6.1.4 College lectures**

When responding to the question on support student teachers receive on teaching practice in COVID-19 era, one of the student teachers, in the focus group discussion, expressed her views follows:

*Lecturers corrected our errors and gave constructive advice that helped us learn more, and become more effective student teachers, which helped to develop confidence. The college lecturers and administration encouraged us to be vaccinated against the COVID-19 pathogen. (Participant FGD1:P02).*

One of the student teachers postulated that:

*After supervision lecturers held discussions with us correcting our mistakes. They gave us constructive advice that helped us to improve our teaching competences, which helped in developing our confidence. The college lecturers and administration encouraged us to be vaccinated against the COVID-19 virus. (Participant FGD1:P02).*

Another student teacher said:

*College lecturers gave us words of encouragement and they highlighted our strengths and weakness after supervision which helped us to improve our teaching competences and confidence. After supervision the college should hold workshops to iron out challenges faced on teaching and also social challenges faced by student teachers. (Participant FGD2:P08).*

One of the student teachers, in the interview, expressed her views as follows:

*Lecturers spend a lot of time that is, 6 hours at our school helping us and we really benefited. Lecturers should not hurriedly supervise student teachers and avoid The Helicopter Approach but spent more time with student teachers at the school giving advice. (Participant STIN: R08).*

Another student teacher explained that:

*Lectures taught us different methods and techniques to apply so as to protect the learners and us against COVID-19. They offered parental care advice. However, some lecturers, especially newly recruited lecturers knew nothing about class records so they failed to teach us how to enter information in the records or identify and rectify our mistakes. (Participant STIN: R05).*

One of the student teachers' mentors, in the interview, said that:

*Lecturers gave student teachers advice and encouragement. Lecturers send information through WhatsApp groups on COVID-19 and tips and hints to use in order to pass Teaching Practice. (Participant SMIN: R05).*

Another student teachers' mentor posited that:

*Lecturers supervised student teachers, gave advice on areas to improve and send handouts through WhatsApp on college expectations in line with teaching methods and classroom organization which prevents the spread of COVID-19. (Participant SMIN: R04).*

The above extracts seem to suggest that most lecturers played supportive roles on student teachers on teaching practice in COVID-19 era. Results revealed that after supervision lectures gave student teachers constructive feedback on lesson execution, record keeping and ways of preventing the spread of COVID-19. Most of the student teachers revealed that they benefited a lot from the feedback given by lectures however a few pointed out that some newly appointed lecturers needed thorough orientation on teaching practice supervision. The findings seem to suggest that constructive advice and feedback from college lectures cultivated the resilience of student teachers on teaching practice in COVID-19 era.

#### **4.6.1.5 Community members**

Answering a similar question on support student teachers receive on teaching practice in COVID-19 era, another student teacher, in the interview, said:

*Community members carried out a mask sawing project and donated the masks for protection against COVID-19 to the student teachers, learners and mentors. The members of the community helped to repair the borehole so that we get clean water. (Participant STIN: R04).*

Another student teacher interviewed had this to say:

*The community was very supportive and they cooperated in providing stationery to learners, masks, and sanitizers and in solving behaviour problems engaged in by learners. Some parents from the community donated mealie meal, vegetables and tomatoes to student teachers as a token of appreciation of our work. (Participant STIN: R09).*

One of the student teachers posited that:

*Community members encouraged us to teach their children in the COVID-19 era by giving us masks and sanitizers. The community was so friendly and they guarded the school to protect student teachers from robbers. (Participant FGD3:P15).*

One of the student teachers' mentors, during the interview, postulated that:

*The community gave student teachers incentives such as sweet potatoes, vegetables and moral support through prayer groups with members of the community. (Participant SMIN: R04).*

To corroborate the above, another mentor remarked:

*The community members give moral and social support. The community provided water and basic needs such as mealie meal and vegetables because the community knows that their children benefit a lot from the student teachers. (Participant SMIN: R05).*

Research findings revealed that most of the community members were very helpful, respectful and friendly except for a few adolescents who threatened student teachers with violence. Most of the community members were cooperative in providing the learners with masks, sanitizers and stationery. The majority of student teachers received food stuffs from the community members and in some cases, the community offered security at the schools. Student teachers felt valued by

the community. From these extracts, it appears that support from the members of the community is instrumental in the development of the resilience of student teachers in COVID-19 era.

#### **4.6.1.6 Family and friends**

When responding to the question on support student teachers receive on teaching practice in COVID-19 era, one of the student teachers, in the focus group discussion, expressed her views as follows:

*Our families were always there for us under difficult times, gave moral support and money when we had not yet received our teaching practice allowances. Our families were very supportive in terms of provision of food, stationery, masks and sanitizers. (Participant FGD1:P04).*

One of the student teachers explained that:

*Our families were very supportive, they bought food and clothing for us before we received our teaching practice allowance from the government. My family members prayed with me over the phones and I felt that they really cared for me. My parents encouraged me to wear a mask properly and sanitize always so as to avoid contracting the COVID-19 pandemic. My family was my pillar of strength socially and financially. (Participant FGD2:P08).*

Another student teacher said that:

*Friends visited me when I feel sick due COVID-19 and gave me lemons and encouraged me to do steaming and drink “Zumbani” tea. They assisted me with media making and setting up of learning centers in the classroom and displaying of charts. (Participant FGD2:P13).*

Another student teacher, in the focus group discussion, added that:

*My friends and I used to pray together for God to protect us against COVID-19 and to give us divine power to solve our problems. My friends encouraged me to stay safe from COVID-19 and also to work hard so that I pass teaching practice. (Participant FGD3:P20).*

Another student teachers, in the interview, expressed his ideas as follows:

*My parents and relatives provided me with money, food, masks, sanitizers and school fees. My parents encouraged me to stay safe from COVID-19 and to work hard and complete the teaching practice. (Participant FGD3:P20).*

One of the student teachers added that:

*My family was my anchor i.e. I got unconditional love from my family that is financial and moral support though I inconvenienced my siblings as my parents spend a lot of money on me. (Participant STIN: R03).*

One of the student teachers' mentors interviewed said that:

*Families are supportive financially especially paying fees and buying food, sanitizers, marks and stationery for the student teachers. (Participant SMIN: R03).*

The above extracts show that most student teachers got maximum support from their families and friends. Results revealed that student teachers received financial, emotional and spiritual support from their families and friends. Data showed that student teachers received money, masks, sanitizers, prayers, words of encouragement and affection from their family members and friends. Through the support from the family members and friends, the student teachers felt loved. From the extracts, it appears that support from families and friends enabled the development of resilience of student teachers in COVID-19 era which helped them continue with teaching practice in COVID-19 era.

#### **4.6.1.7 Social Media**

When responding to the question on support student teachers receive on teaching practice in COVID-19 era, one of the student teachers, in the focus group discussion, expressed her sentiments as follows:

*Social media played a vital role in making people aware of the COVID-19 pandemic. We got a variety of health tips on how to treat our selves when affected by COVID-19 e.g., steaming through social media. (Participant FGD2:P12).*

Another informant explained that:

*We got a variety of health tips on how to treat our selves when affected by COVID-19 e.g., steaming through social media. In some cases, social media passed on wrong information about the vaccines so people developed a negative attitude towards vaccination. Some information in social media on COVID-19 was intimidating. (Participant FGD3:P19).*

One of the participants said in the focus group discussion:

*As student teachers we used social media platforms to share information about the new methods of teaching to be used in the COVID-19 era. We used our WhatsApp group to alert each other on the visits by college lecturers. College lecturers used social media platforms to pass information on record keeping and tips on eternal examining. (Participant FGD3:P18).*

One of the student teachers, during an interview said:

*Social media encouraged us to follow the COVID-19 protocols to protect ourselves against COVID-19 and held awareness campaigns on vaccination against COVID-19. (Participant S1RN: 01).*

Another student teachers' mentor interviewed expressed her views as follows:

*The social media was very informative. We got most of the information on COVID-19 from social media and student teachers get information from the college through WhatsApp. Social media encouraged adherence to COVID-19 protocols, vaccination and gave update on COVID-19 prevalence in the country. Vaccinated student teachers felt safe and more confident. (Participant SMIN: R03).*

In corroboration one of the student teachers' mentors had this to say:

*Social Media gave updates on the hot spots of COVID-19 and ways of protecting one-self from COVID-19 that resulted in behaviour change. Social media encouraged vaccination and named the vaccination centres. (Participant SMIN: R05).*

One of the student teachers' mentors added that:

*Radio lessons and rhymes aired onto on TV or radio i.e., on safe teaching methods to use in the COVID-19 era. Updates on COVID-19 situation in the country were spread through social media. (Participant SMIN: R01).*

From these extracts, it appears that social media played a vital supportive role of the student teachers on teaching practice in COVID-19 era. Most of the participants revealed that student teachers received important information through social media such as notes on safe methods to use that could prevent the spread of COVID-19, updates on the prevalence of COVID-19, awareness campaigns on vaccination and lockdown updates. Through the use of safe teaching methods and vaccination student teachers felt safe from contracting the COVID-19 virus so they became more confident. This implies that most of the participants felt that support from social media cultivated the resilience of student teachers in COVID-19 era.

#### **4.6.1.8 Donor community**

Answering a similar question on support student teachers receive on teaching practice in COVID-19 era, another student teacher, in the interview, said that:

*Donors donated masks for the learners though they were not enough to cover the whole term. One of the donor organizations fumigated the whole school for free. Feed My Hungry Children and Better Schools Programme donated food and mask and sanitizers to schools. Save the Children Fund donated food and groceries for teachers and student teachers. (Participant FGD1:P06).*

Another participant added this:

*There were very few donors during the COVID-19 era but they helped so much by donating masks, sanitizers and thermometers. One of the donor organizations gave food hampers to the teachers and as student teachers we also benefited. Some donors discriminated against student teachers so we got nothing from what they donated to the school. (Participant FGD3:P21).*

In corroboration one of the student teachers remarked:

*The Ministry of Primary and Secondary Education donated masks, sanitizers and hydrogen peroxide for fumigation of classrooms. The donor community supplied schools*

*with food, masks and sanitizers, for example, Feed My Hungry Children. (Participant SMIN: R06).*

Depicted in Participant FGD3:P21's words:

*There were very few donors during the COVID-19 era but they helped so much by donating masks, sanitizers and thermometers. One of the donor organizations gave food hampers to the teachers and as student teachers we also benefited. However, some donors discriminated against student teachers so we got nothing from what they donated to the school.*

To confirm the above, one of the student teachers' mentors remarked:

*Donors gave us nothing. (Participant SMIN: R04).*

The above verbatim quotes reveal that a few donors donated masks, sanitizer, fumigation chemical, food hampers and sanitary wear. Most of the participants showed that the donations came as a relief to most of the student teachers. However, data also show that some student teachers did not receive any donations. Results seem to suggest that most of the student teachers who received the donations felt relieved of the challenges caused by COVID-19 and the sense of relief promoted their resilience on teaching practice in COVID-19 era.

#### **4.6.2. Sub-them 4.2: Expected support**

Answering a similar question on support student teachers receive on teaching practice in COVID-19 era, another student teacher, in the interview, expressed her sentiments as follows:

*After the first supervision by college there was need for teaching practice workshops virtually to discuss and iron out the challenges, we encountered due to COVID-19. Lecturers were supposed to inform us of their visit a week earlier before they visited us. There was need for the college to take care student teachers who feel sick due to COVID-19. (Participant STIN: R01).*

During the interview, one of the student teachers echoed that:

*Both college and school supervisors should supervise student teachers regularly so that student teachers get enough guidance. The college should provide masks and sanitizers*

*to student teachers. The College should have set up isolation centres for student teachers where one would be treated and taken care of through provision of medical care, food and psychological counseling. (Participant STIN: R02).*

Another student teacher postulated that:

*When I contracted COVID-19, I expected the college lecturers to visit me. Was quarantined for 14 days and the Head of Teaching Practice Department threatened to defer, me which gave me a lot of stress. The College should have set up isolation centres for student teachers where one would be treated and taken care of through provision of medical care, food and psychological counseling. (Participant STIN: R02).*

During a focus group discussion, one of the student teachers expressed his views as follows:

*The kind of support I think is of prior importance is for the government to set up health facilities at every school as learners who fell sick were just sent home without any medical help. When I contracted COVID-19, I expected the college lecturers to visit me. Was quarantined for 14 days and the Head of Teaching Practice Department threatened to defer, me which gave me a lot of stress. (Participant FDG1: P03).*

Another student teacher added that:

*I expected the school to provide manila sheets and markers. College lecturers should have given us ideas on how to deal with COVID-19 pandemic. College to make sure that student teachers who contracted COVID-19 got proper medication and visit the student. The College lecturers should do counseling to the COVID-19 infected and affected student teacher and also on any other changes faced by student teachers on teaching practice. (Participant FGD2: P09).*

One of the student teachers' mentors interviewed said:

*The college should provide masks, sanitizers, food hampers to student teachers and reduce TP fees to motivate student teachers so that they afford to buy stationery and food. The college and government to provide mechanical assistance when the student teachers contracted COVID-19. (Participant SMIN: R02).*

Another student teachers' mentor opined that:

*The government needs to increase T. P. allowances because student teachers need to buy stationery, food and clothing. Not all schools provide them with stationery and accommodation. Need to buy clothes so that they come to work presentable. Colleges should have supplied PPEs and impart knowledge on the teaching methods suitable to use in the COVID-19 era. (Participant SMIN: R06).*

Another student teachers' mentor added that:

*Student teachers to be given incentives by the school, T.P fees to be reduced to easy financial challenges and counseling services to be made available for student teachers on teaching practice. Student teachers need to be remunerated handsomely by government since the T.P. allowance is not adequate. (Participant SMIN: R01).*

Furthermore, Participant SMIN: R02 claimed that:

*The college should provide masks, sanitizers, food hampers to student teachers and reduce TP fees to motivate student teachers so that they afford to buy stationery and food. The college and government to provide mechanical assistance when the student teachers contracted COVID-19. The college should provide free data to student teachers and workshop student teachers on the use of e-learning.*

The above quotes seem to suggest that student teachers expected support from different stakeholders but it was not forthcoming. Most of the participants expected the college needed to provide student teachers with sanitizers, masks, reduce teaching practice fees and to hold teaching practice workshops virtually on professional issues and the COVID-19 pandemic. The majority of the participants felt that the government should increase teaching practice allowances and set up health facilities at every school to combat the COVID-19 virus. Most of the participants felt that the government should have set health facilities at each school to deal with COVID-19 issues, such as information dissemination, testing and treatment. This implies that lack of the above listed support was a threat to the resilience of student teachers on teaching practice in COVID-19 era.

#### **4.6.3 Sub-theme 4.3: Developing capacity for resilience in student teachers**

When responding to a question on ways of developing resilience in student teachers prior to teaching practice, one of the student teachers, in the interview expressed her sentiments as follows:

*College lecturers were aware of teaching practice challenges e.g., difficult Heads, mentors and learners so they should teach us how to deal with such people. Micro and macro teaching to be done so as to prepare us for the actual teaching we will face on teaching practice. The college should introduce a subject called 'Challenges and Solutions during Teaching Practice' and teach the subject in preparation for teaching practice. (Participant STIN: R01).*

One of the student teachers postulated that:

*The college lecturers should present practical situations or scenarios on teaching practice challenges so that student teachers get a feel of the situation they are likely to encounter while on teaching practice. Role-plays or dramatization will help student teachers get first-hand information on the challenges and ways to solve the challenges. (Participant STIN: R03).*

One of the informants said the following:

*Student teachers should be equipped with thorough knowledge on lesson delivery to boost confidence. There is need to do lectures and discussions on T.P challenges and possible solutions. College to produce handouts or hold workshops with mentors on college expectations for mentoring to be effective. (Participant STIN: R10).*

Another participant opined that:

*College to raise awareness to students on challenges they are likely to face e.g., relationships or challenges on teaching and suggest possible solutions. Heads of schools to come to college and address student teachers on their expectation and also college to upraise Heads on the college expectation (Participant STIN: R07).*

To further enhance the above, one of the student teachers remarked:

*Lecturers should make student teachers aware of how to solve some challenges encountered on T.P. The college needs to equip student teachers with knowledge of how to survive in hard times especially in the COVID-19 era and economic hardships prevailing in Zimbabwe. The college lecturers should adequately impart knowledge to student teachers on the use of I.C.T in teaching e.g., Google class. (Participant STIN: R05).*

The above quotes seem to suggest that most student teachers who took part in the interviews were of the view that the college should thoroughly prepare student teachers for teaching practice through micro-teaching and macro-teaching. Results show that the college should also expose student teachers to simulations of the actual situation obtained in schools before teaching practice so that they become aware of the challenges to avoid reality shock. Findings show that student teachers should be mentally prepared and hardened to meet the teaching practice challenges during COVID-19.

Answering a similar question on ways of developing resilience in student teachers prior to teaching practice, another student teachers' mentors, in the interview, expressed his views as follows:

*The college needs to induct student teachers on the Dos and Don'ts on TP and to invite health professionals to do awareness campaigns on COVID-19 pandemic and other health issues. Lecturers to do lectures on TP challenges and possible solutions through role-plays and dramatization. Peer teaching to be done and lecturers to play videos on lesson presentation to student teachers before they go on teaching practice. (Participant SMIN: R02).*

Depicted in Participant SMIN: R05's words:

*Lecturers should give student teachers enough information on how to scheme, plan and classroom management. Give student teachers many handouts to use while on T. P. College lectures to develop in student teachers an awareness of the challenges they are likely to face during T. P. so that they become mentally prepared to meet the challenges. The teacher education curriculum should introduce a subject like 'Life Skills – Challenges and Solutions on T. P. or Survive Teaching Practice.*

According to Participant SMIN: R06:

*“College needs to make student teachers aware of all the challenges they are likely to face and how they are going to solve the problems. Training on the use of ICT so that they are able to use e learning while on T. P. and research for information e.g., subject content for newly introduced subjects”.*

Most of the student teachers’ mentors interviewed were of the idea that the college should include in their curriculum’s lectures covering teaching practice challenges and their solutions. Results of the study seem to suggest that student teachers should be thoroughly trained on how to use e-learning prior to teaching practice to avoid technological shock. Most participants felt that the college should mentally prepare student teachers for teaching practice challenges by developing in them problem-solving skills, how to establish relationships and promote positive emotions and should not only focus on academic and professional studies.

Answering a similar question on ways of developing resilience in student teachers prior to teaching practice, another student teacher, in the interview, expressed her views as follows:

*The timetable is overloaded with different subject areas and records are too many e.g., reading record, remedial and extension records, tests and progress record book. We ended up cheating in order to update the records. Out of the 8 record books only 3 records i.e., scheme book, planning book and register are done perfectly without cheating so there is need to reduce the number of class records. (Participant FGD1:P06).*

One of the student teachers said the following:

*Preparation of student teachers for teaching practice is not in line with the situation obtaining in the schools. We had no knowledge of the new curriculum learning areas introduced in primary schools and yet we were expected to teach the learning areas like Visual and Performing Arts (V.P.A), Family Religion and Moral Education, (FAREME), Dance, and Mass Displays. (Participant FGD1:P07).*

Another student teacher remarked:

*Our third term during our first year in college was done through e-learning due to COVID-19 so most of us were not adequately prepared for teaching practice, hence the college needed to make follow ups when we went on teaching practice to teach us on record keeping and teaching techniques. (Participant FGD1:P06).*

One of the student teachers explained that:

*College to cover the syllabus so as to fully prepare student teachers for teaching practice. We failed to cover the syllabus due to college closures caused by COVID-19 and as a result we lacked knowledge on how to make some of the records e.g., reaching record book, the progress record book, remedial and extension records. The college to develop our knowledge and skills on scheming, planning and teaching techniques. The college to teach us on the how to handle misbehaving students and also parents through discussions and dramatization so that we have knowledge on how to handle different people. (Participant FGD1:P01).*

Another student teacher opined that:

*College to practically expose student teachers to real situations obtaining in practicing schools. There is need for student teachers to visit different schools while still at college so as to get a feel of the realities in different schools. Student teachers should be made aware of teaching practice external assessment procedures as it causes a lot of anxiety in student teachers. (Participant FGD2:P13).*

One of the student teachers expressed her sentiments as follows:

*The college should offer a course entitled "Challenges Encountered on Teaching Practice and their possible solutions" or "How Student Teachers Survive Teaching Practice". College to practically expose student teachers to real situations obtaining in practicing schools. There is need for student teachers to visit different schools while still at college so as to get a feel of the realities in different schools. (Participant FGD2:P14).*

In corroboration one of the student teachers remarked:

*College should teach student teachers problem solving skills and endurance. Instead of preparing us, they instill fear in us. Student teachers should be equipped enough skills to deal with the different characteristics of the different mentors whom they meet in schools. The college should inform us on the different personalities of heads and mentors so that student teachers will know how to interact with people of different personalities.* (Participant FGD2:P13).

The above extracts are an indication that there is a mismatch between what is taught in college and the situation obtaining in schools, especially regarding the new curriculum. What is taught in college is divorced from the new subjects taught in the schools in line with the competence-based curriculum hence the need for teacher education curriculum to be reviewed in line with the primary school curriculum. Most of the participants felt that the college should thoroughly prepare student teachers on scheming, lesson planning, lesson execution, record keeping and class control. The majority of the participants were of the view the teacher education curriculum should introduce a resilience subject, for example, ‘Challenges and Solutions to Teaching Practice Challenges. The above views imply that the teachers’ colleges should develop resilience in student teachers before teaching practice.

#### **4.7 Discussions of findings of Theme 4**

The fourth theme that emerged from the focus group discussions and semi-structured interviews was on support student teachers receive on teaching practice in COVID-19 era.

##### **4.7.1 Contextual support**

Research findings from focus group discussions and semi-structured interviews established that student teachers receive professional support, social support, psychological support, material support, financial support and spiritual support from various stakeholders such as school administrators, student teachers’ mentors, college lectures, colleagues, friends, family members and social media. These findings are consistent with a study by Sriwiyanti, Saefudin & Yusoff (2021) identified four types of support that student teachers may receive to promote their resilience, namely, emotional support (trust, caring, empathy, love, acceptance, being emotionally present when a person needs a friend) instrumental support, that is, helping behaviour (loaning money, providing material needs, helping in a difficult situation, spending time together) informational support, that is providing knowledge or advise to someone (giving

insights on how to solve a problem, providing information, advises) and appraisal support, that is evaluative feedback and rewards (giving verbal affirmation, praises, constructive critique, giving feedback regarding progress). Furthermore, a study by Le Cornu (2013) acknowledged that in situations where early career teachers were able to establish trusting, respectful and reciprocal relationships, they perceived themselves as more confident and competent, which enabled them to feel competent.

Findings from this current study concur with Benjamin and Black's (2012) view that supportive administrators are approachable and also find time with their subordinates, albeit briefly to connect with them and listen to their concerns. Data show that the majority of school administrators were concerned with the health of student teachers so they encouraged the student teachers to be vaccinated against COVID-19 however, most participants felt that the government should have set health facilities at each school for information dissemination, testing and treatment of those who contracted COVID-19. It emerged from the study that school administrators provided student teachers with masks, sanitizers and stationery though they were inadequate in some cases. Furthermore, participants revealed that the school administrators were approachable, friendly, social support, and gave professional support spelling out the required standards of performance and giving constructive feedback. The findings of this study are consistent with Arcley-Rojas (2019) who posits that positive feedback the student teachers received helped them through their teaching practice and encouraged them to face the challenges of teaching with confidence in themselves. While confirming the findings from this study, a study by Le Cornu (2013) pointed out that where school leaders encourage, support and establish the development of relationships based on respect, trust, care and integrity, student teachers appeared to flourish.

The current study alludes to Izadinia's (2015) findings that established two types of support mentors provide to their mentees during teaching practice, these are; instructional support which relates to knowledge, strategies and skills mentors develop in their mentees and psychological support which has to do with enhancing self-esteem, confidence and feelings of effectiveness. It emerged from this study that the majority of student teachers' mentors demonstrated and developed teaching competences in student teachers on teaching practice, supervised student teachers and gave positive comments and constructive criticism. Research findings showed that

student teachers' mentor demonstrated how to effectively use teaching methods which did not spread COVID-19 and helped in enforcing COVID-19 regulations. Most of the participants were of the view that student teachers' mentors and qualified teachers gave student teachers social, moral and financial support wholeheartedly resulting in the development of resilience of student teachers. The findings resonated with an earlier study of mentoring by Hudson and Hudson (2016) who established that mentors play a critical supportive role, especially in terms of goal setting, enabling the development of reflective practices, modeling affective teaching strategies, giving feedback and guiding mentees. In the same vein, Izadinia (2015) posits that providing support to student teachers on teaching practice was found to help them develop confidence to take risks and experiment with new approaches in the classroom. While confirming the results from this study, Hudson and Hudson (2016) reiterated that modeling essential teaching skills by the mentor is important in the development of student teachers' teaching competencies.

In one of the studies McIlveen & Perera (2016) found out that receiving instrumental support (for example, some money) and emotional support (for example, in terms of expression of affection, encouragement, and attention) from parents, siblings and friends contributed to diminished feelings of anxiety among Bahraini student teachers. Results revealed that student teachers received financial, emotional, and spiritual support (prayers) from their families, friends and community members. Through the support from the family members and friends, the student teachers felt loved. The findings from this study corroborate those by Le Cornu (2013) who claimed that more often the teachers' friends and family members encouraged them and reaffirmed for them that they were capable and up to the challenge.

Research findings indicated that college lectures, after supervision held discussions with the student teachers and student teachers' mentors to give appraisals and feedback on the strengths and grey arrears observed. Most participants felt that the discussions were very educative and fruitful as they helped student teachers improve their teaching competencies. Data revealed that college lecturers gave student teachers hints and tips on how to deal with the COVID-19 pandemic during the teaching and learning episodes. Most participants felt that student teachers received valuable advice on how to pass teaching practice external examining which the student teachers feared the most. Findings from this study corroborated Costa and Onofre's (2015) study which pointed out that feedback is essential and valuable for student teachers because it

contributes to increasing their level of confidence and self-efficacy, which at the same time are part of the characteristics of the resilient person. However, most of the participants felt that the college should have donated masks and sanitizers to student teachers, reduced teaching practice fees to alleviate economic hardships, provided data bundles, visited student teachers who contracted COVID-19 and provided counseling services as student teachers were subjected to fear and anxiety due the outbreak of COVID-19.

It also emerged from the findings that most of the participants were of the opinion that student teachers received important information through social media such as notes on safe methods to use that could prevent the spread of COVID-19, updates on the prevalence of COVID-19, awareness campaigns on vaccination and lockdown updates. Participants further explained that through the use of safe teaching methods and COVID-19 vaccinations student teachers felt safe from contracting the COVID-19 virus so they became more resilient. Most of the participants revealed that student teachers received important information through social media such as notes on teaching methods to use that could prevent the spread of COVID-19 from college lecturers through WhatsApp, updates on prevalence of COVID-19, awareness campaigns on vaccination and lockdown updates. Through the use of safe teaching methods and vaccination student teachers felt safe from contracting the COVID-19 virus so they became more confident. The findings resonated with earlier study by Shukla & Shi (2021) who opined that instrumental, emotional and social support plays an important psychological wellbeing since it may act as a mediator of life stress. However, data revealed that very few student teachers got support from the donor community and also that the government should have given student teachers a COVID-19 allowance. While confirming the results from this study (Gu, 2014; Jordan, 2017) reiterated that supportive relationships and mutuality are the main factors of resilience building as relationships with school administrators, cooperating teachers, college supervisors, parents and learners constituted a significant factor in the student teachers' process of developing their resilience. In support of the above views, Kim and Corcoran (2017) posit that social support received from college lecturers and peers in the teacher education programme is conceived as an important component of student teacher engagement and job satisfaction. The findings of this study were authenticated by Graber, Pichon and Carabine's (2015) study which established that protective mechanisms such as parental support, secure attachment, mentoring relationships, supportive friends, and academic resilience promote resilience in the face of adversity.

#### **4.7.2 Developing capacity for resilience in student teachers**

The current study's findings contradict with available literature on teacher education programs in Australia. A perusal of the literature shows that resilience has been acknowledged as a critical non-cognitive attribute of student teachers (Klassen, *et al.*, 2018) and in countries such as Australia, teacher education providers are now charged with the responsibility to prepare 'classroom-ready teachers' (Teacher Education Ministerial Advisory Group, 2015). This important non-cognitive capacity for selecting applicants for teacher education include motivation, strong interpersonal and communication skills and resilience (Australian Institute of Teaching and School Leadership, 2015). It emerged from this study that teacher education curriculum in Zimbabwe should introduce a resilience subject, entitled, for example, 'Challenges and Solutions to Teaching Practice Challenges' or 'Life Skills – Challenges and Solutions on Teaching Practice' or 'Challenges Encountered on Teaching Practice and their possible solution' or 'How Student Teachers Survive Teaching Practice'. Results of the study seem to suggest that student teachers should be thoroughly trained on how to use e-learning prior to teaching practice to avoid technological shock. Furthermore, most participants felt that the college should mentally prepare student teachers for teaching practice challenges by developing in them problems solving skills, how to establish relationships and promote positive emotions. The above views from most of the participants imply that teacher education programs should develop resilience in student teachers prior to teaching practice. These findings resonate with earlier studies (Gu and Day, 2013; Johnson, *et al.*, 2014) who claimed that teachers' capacity to deal with challenges related to the teaching profession requires resilience which is particularly important for novice teachers.

The findings of this study revealed some similarities between the teacher education in Zimbabwe and the United States of America. A perusal of the literature shows that teacher education programs in the United States of America focus on preparing student teachers for classroom-based instructional practice mainly focusing on course work on child development, content and methods/ field courses covering assessment, planning, instructional and student engagement strategies (Council for the Accreditation of Educator Preparation, 2019). What is missing from the United States of America teacher education programs is work pertaining to the social, emotional and motivational needs of teachers once they enter the field (Sikma, 2021). Most participants felt that the college should mentally prepare student teachers for teaching practice challenges by developing in them problems solving skills, how to establish relationships and

promote positive emotions and should not only focus on academic and professional studies. It emerged from this study most student teachers were not mentally prepared to face teaching practice challenges inherent in teaching practice which were exacerbated by the outbreak of COVID-19. Data show that most of the participants felt that the teacher education curriculums focus mainly on academic subjects, teachings methods and class/classroom management at the expense of student teachers' psychological wellbeing. The current research findings are consistent with the University of Zimbabwe, Department of Teacher Education requirements for a candidate to pass the Diploma in Education Primary. To pass this competitive , internationally recognized Diploma in Education programme candidates should satisfy examiners in the broad areas of teacher education competence, these are, Theory of Education (Psychological, Sociological, and Philosophical foundations of education as well as Inclusive Education); Professional Studies (general classroom practice, class management, subject content and methodology, scheming, planning, measurement and evaluation, Information and Communication Technology, National and Strategic Studies, Health and Life Skills), Main Subject (Enrichment subject) and Teaching Practice (University of Zimbabwe, 2015). While confirming the results from this study, Sikma, (2021) reiterated that generally missing from the Zimbabwe and United States teacher education programs is work pertaining to the social, emotional and motivational needs of teachers once they enter the field. It emerged from the findings that most of the participant believed that the teacher education curriculum in Zimbabwe should introduce a resilience subject so as to nurture and develop resilience in student teachers in order for them to be ready to meet the demands of a plethora of teaching practice challenges exacerbated by the outbreak of COVID-19. The findings of this study concur with several scholars (Beltman, *et al.*, (2018); Peixoto, *et al.*, 2018) who widely acknowledged that recent research studies showed evidence of resilience-related skills and strategies which can be enhanced during pre-service teacher education.

#### **4.8 Summary**

Chapter 4 presented the main findings and discussion of findings from the data collected through focus group discussions and semi-structured interviews. Four themes emerged from the findings of this current study. Firstly, COVID-19 induced teaching practice stressors. It emerged from this study that COVID-19 impacted negatively student teachers on teaching practice as they were subjected to several teaching practice stressors such as contracting COVID-19 virus, fear of

death, stigmatization, school closures, prolonged teaching practice span, transference of face-to-face teaching to online education which they were not well-versed in. Secondly, factors that hinder the resilience of student teachers on teaching practice in the COVID-19 era. It emerged from this study that a number of factors hindered the resilience of student teachers on teaching practice in COVID-19 era such as lack of teaching competence to use during COVID-19, lack of technological pedagogical content knowledge, negative relationships, work overload, class and classroom management, and teaching practice supervision during COVID-19. Thirdly, personal and contextual resources that contribute to resilient outcomes in student teachers on teaching practice in COVID-19 era. It emerged from the current study that personal resources (emotions, motivation, social competence, self-efficacy), contextual resources (relationships) and coping strategies cultivated resilience in student teachers which contribute to resilient outcomes of student teachers on teaching practice in COVID-19 era. Lastly, support student teachers receive on teaching practice in the COVID-19 era. It emerged from this current study that contextual support from school administrators, student teachers' mentors, college lectures, fellow student teachers, learners, parents and friends promote resilience of student teachers on teaching practice in COVID-19 era. Most of the participants felt that the pre-service teacher education curriculum should include a subject on resilience so as to develop in student teachers' resilience related skills and strategies that promote the resilience of student teachers on teaching practice in the face of adversity.

The subsequent chapter deals with a summary of the research findings, conclusions and recommendations.

## **CHAPTER 5**

### **SUMMARY, FINDINGS, RECOMMENDATIONS AND CONCLUSIONS**

#### **5.1 Introduction**

Chapter 4 focused on the analysis, presentation, discussion and interpretation of the research findings. The researcher discussed findings of the study after analyzing data gathered from focus group discussions and semi-structured interviews. The discussion and interpretation of the research findings were substantiated by verbatim quotes from participants of this study. Research findings were discussed in relation to relevant literature reviewed in Chapter 2 which was extensively used to confirm or refute the research findings. The interpretive phenomenological analysis (IPA) approach was used to analyse and interpret the results.

This current chapter presents the summary, findings, recommendations of the research study and the conclusions drawn from the results of the study. The chapter illuminates a synopsis of the answers to the research questions and objectives of the study. Additionally, the chapter also highlights the strengths and limitations of this research study. The chapter culminates with some recommendations for policy, practice and research in education.

#### **5.2 Overview of the study**

This study is grounded in the psychology of education focusing on exploring student teachers' resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe. The major aim of the study was to explore the student teachers' resilience on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe. Despite many research initiatives on resilience of teachers, the researcher still had to find research in Zimbabwe, on resilience of student teachers on teaching practice in the COVID-19 era. My qualifications in psychology of education, extensive experience as a lecturer, a Lecture-in-Charge of Teaching Practice, a Head of Teaching Practice Department and Teaching Practice External Assessor seconded to the Department of Teacher Education, University of Zimbabwe, enabled me to observe how some student teachers were resilient amidst teaching practice stressors while others failed to resist the pressure and failed teaching practice or drop out, hence the need for this study to propose a

resilience framework that will be used to cultivate resilience in student teachers prior to teaching practice.

The study was carried out at three Masvingo District primary schools. The three sites, twenty-one (21) student teachers on teaching practice and six (6) student teachers' mentors were purposively selected to take part in the study. This was because of the information richness and convenience at their practicing schools and work places. This study was wholly informed by the social constructivist philosophical worldview through a qualitative research design. The study also adopted a phenomenological research study strategy which calls for the lived experiences of the research participants. Focus group discussions and semi-structured interviews were employed as data collection tools as these methods are embedded in qualitative research design, social constructivist paradigm and the phenomenological research strategy. The data collection tools highlighted above were instrumental in coming out with the major themes and sub-themes relevant to the research questions. Focus group discussions and semi-structured interviews were instrumental in achieving the aim and objectives of the study and in providing answers to the research questions outlined below

Aim of the study:

- To explore the student teachers' resilience on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe.

Objectives of the study:

- To explore the major teaching practice stressors in the COVID-19 era in Masvingo District, Zimbabwe.
- To explore the factors that hinder the student teachers' resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe.
- To explore the personal and contextual resources that contribute to resilience outcomes in student teachers on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe.
- To determine the kind of support that student teachers receive on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe.

### **5.3 Findings of the study**

The main aim of the study was to explore the student teachers' resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe. The following research questions were explored to in order to obtain an in-depth understanding of the issues at hand. Thus, the presentation of the main findings was done following the order of the research questions. Firstly, what are the major teaching practice stressors in COVID-19 era in Masvingo District, Zimbabwe? Secondly, what are the factors that hinder the student teachers' resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe? Thirdly, what personal and contextual resources contribute to resilience outcomes in student teachers on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe? Lastly, what kind of support do student teachers on teaching practice receive in COVID-19 era in Masvingo District, Zimbabwe? The following themes emanated from the data generated through focus group discussions and semi-structured interviews in line with the research questions outlined above: Theme 1: COVID-19 induced teaching practice stressors; Theme 2: Factors that hinder resilience of student teachers on teaching practice in the COVID-19 era; Theme 3: Personal and contextual resources that contribute to resilience outcomes in student teachers on teaching practice in COVID-19 era and Theme 4: Support student teachers receive on teaching practice in the COVID-19 era.

#### **5.3.1. Response to research question 1: What are the major COVID-19 induced teaching practice stressors in Masvingo District, Zimbabwe?**

*Objective: To explore the major teaching practice stressors in COVID-19 era in Masvingo District, Zimbabwe.*

##### **5.3.1.1 Fear and anxiety of contracting the COVID-19 virus**

Regarding the major teaching practice stressors induced by the COVID-19 pandemic, this study established that the COVID-19 pandemic caused a lot of stress on student teachers on teaching practice. It emerged from the findings that student teachers lived in perpetual fear of contracting the COVID-19 virus, fear of getting sick and eventually dying, fear of spreading COVID-19 virus to family members, fear of isolation and stigmatization after contracting the COVID-19 virus. The study uncovered that student teachers were at a very high risk of contracting the COVID-19 virus due to the shortage of personal protective clothing, shortage of masks and sanitizers, shortage of fumigation chemicals, overcrowded classrooms due to high pupil-teachers

ratio and lack of knowledge on how to enforce the COVID-19 regulations. The study revealed that most learners came to school without masks as parents could not afford to buy masks due to poverty and loss of income caused by COVID-19. Results of this study revealed that the student teachers were highly stressed and anxious due to the prevalence of COVID-19 pandemic as the number of positive cases and deaths kept on rising in Zimbabwe and the world over. Thus, the fear of being infected by the COVID-19 virus greatly affected the psychological, intellectual, and emotional wellbeing of the student teachers.

#### ***5.3.1.2 National lockdowns and school closures***

It was established that COVID-19 caused national lockdowns and school closures. Due to the national lockdowns and school closures student teachers could not proceed with teaching practice so the teaching practice period was prolonged. Data showed that instead of doing teaching practice for three terms, student teachers were on teaching practice for four terms. It emerged that due to travel restrictions student teachers stayed at their practicing schools although they were closed so they felt isolated, isolated and depressed as they were away from their families and friends. The study uncovered that school closures caused a feeling of hopelessness and uncertainty on the part of student teachers. The results indicated that student teachers suffered from economic hardships due to the extension of the teaching practice period as the government ceased their teaching practice allowances at the expiry of the three-term period, and also the college made student teachers to pay teaching practice fees for the extra term.

#### ***5.3.1.3 Pedagogy during COVID-19***

It emerged from this study that child-centred teaching methods such as group work, discussion method, experimentation and field trips were banned by the Ministry of Primary and Secondary Education as they were the major drivers of the COVID-19 virus. Results showed that student teachers were encouraged to use the lecture method and the Socratic Method; however, most of the participants felt that the methods were ineffective as they did not encourage active participation by the learners so the learners failed to grasp the concepts. The results of the study indicated that student teachers had challenges in using teaching methods which did not spread COVID-19, enforcing proper wearing of masks and maintaining physical social distancing. Data show that most learners removed masks and failed to maintain physical social distance. Findings indicated that that student teachers were stressed, depressed and lost confidence in their ability to

teach when the learners failed to grasp the concept and also due to their inability to enforce COVID-19 regulations such as proper wearing of masks and maintaining physical social distancing in the classroom.

#### ***5.3.1.4 e-learning as an alternative mode of teaching and learning***

The study established that at the height of the spread of COVID-19, schools were closed and face-to-face teaching was transferred to e-learning. Findings showed that although e-learning was very effective in controlling the spread of COVID-19 it had a lot of challenges which rendered it an ineffective way of teaching and learning. The participants unanimously agreed that e-learning had a plethora of challenges such as lack of internet connectivity, lack of electricity and constant power cuts, and lack of compatible gadgets such as laptops, smartphones, expensive WIFI and data bundles. In addition, the study indicated that the student teachers lacked technological pedagogical content knowledge on how to use e-learning platforms such as Zoom, Google Class and Microsoft Teams as they were not prepared to use online learning while in college due to early closures and disruption of learning activities as a result of the COVID-19 pandemic. Implicitly the use of e-learning caused a lot of stress and anxiety on the part of student teachers as they lacked the pre-requisite technological skills and technological pedagogical content knowledge. Furthermore, the study indicated that due to lack of internet infrastructure and lack of knowledge of online learning student teachers could not complete teaching practice in their placement schools within the stipulated three terms due to under supervision and lack of teaching practice external examining. Thus, there was a lot of risk and uncertainty which affected the student teachers' morale, engagement, job satisfaction, emotional, social and psychological wellbeing.

#### ***5.3.1.5 State of preparedness for schools re-opening***

Findings from this study indicated that most schools were not prepared for reopening due pre-existing challenges of infrastructure and lack of finance to buy sanitizers, masks, additional furniture and fumigation chemicals. It emerged from this study that most of the educators including student teachers were not aware of the preparatory measures which needed to be put in place ahead of the re-opening of schools. Lack of adequate knowledge, masks, sanitizers, furniture and classrooms exposed student teachers to very high chances of contracting the coronavirus which causes a lot of fear, anxiety and stress. The study found that when schools

finally re-opened, a staggering of classes, hot sitting or splitting of classes were put in place to decongest the classroom to maintain social distancing. These measures resulted in student teachers having to teach two sessions daily which resulted in work overload. Findings revealed that student teachers had no time to rest so they suffered from fatigue, headaches, high blood pressure and forgetfulness which affected their health, physical and mental wellbeing.

### **5.3.2. Response to research question 2: What are the factors that hinder resilience of student teachers on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe?**

*Objective: To explore the factors that hinder the student teachers' resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe.*

#### *Teaching competences*

Pertaining to the factors that hinder the resilience of student teachers on teaching practice in the COVID-19 era, research findings revealed that factors such as lack of teaching competences, negative relationships, behaviour problems, work overload and adjustment of classroom organization were a hindrance to the resilience of student teachers on teaching practice during COVID-19. The study established that during their first term on teaching practice the student teachers lacked the basic teaching competences of scheming, planning, lesson execution and record keeping they were not adequately prepared as they only learnt for two terms instead of three terms then the college had to close due to outbreak of COVID-19 pandemic. In addition, the study revealed that student teachers lacked content knowledge of the newly introduced subjects of the primary school curriculum such as Visual and Performing Arts (VPA), Family Religion and Moral Education (FAREME), Heritage Social Studies (HSS) and that there was a mismatch between what is taught at college and situation obtaining in the schools. The results of this study revealed that there is a need for curriculum harmonization so that what is taught to student teachers at college goes hand in hand with the subjects taught in the schools to enhance the student teachers' teaching competencies. The study uncovered that as a result of a lack of teaching competencies and content knowledge, teaching practice created a mixture of anticipation, low self-esteem, anxiety, excitement and apprehension, a situation which was exacerbated by the COVID-19 pandemic.

### *Negative relationships*

It was established that professional work challenges like poor relationships with school administrators, student teachers' mentors, college lecturers, and learners and complaints by parents hindered resilience of student teachers on teaching practice in the COVID-19 era. The study found that due to poor relationships with the school administrators student teachers were dehumanized, degraded, humiliated and did not get instructional support thereby hindering their resilience on teaching practice in COVID-19 era. The study uncovered that due to poor relationships and fear of COVID-19 the student teachers' mentors were reluctant to offer instructional, morale, social and material support to student teachers. Furthermore, findings of this study established that, student teachers were not treated like a teacher, were looked down upon by some school administrators and student teachers' mentors and were forced to fulfill their mentors' personal daily tasks, lacked feedback and support for their teaching especially on teaching strategies and problem-solving skills in line with the COVID-19 pandemic. In addition, the study indicated that some school administrators, student teachers' mentors and college lectures did not want to relate to student teachers who once contracted the COVID-19 virus as they isolated, shunned and stigmatized the student teachers which negatively affected their social and psychological wellbeing. It can be posited that lack of mutuality and trusting relationships hindered the development of resilience of student teachers on teaching practice in the COVID-19 era.

#### ***5.3.2.1 Class and classroom management***

The study established that class and classroom management in the COVID-19 era was a great challenge which hindered the resilience of student teachers on the teaching practice during the COVID-19 era. The study established that due to prolonged school closures caused by COVID-19, some learners developed a negative attitude towards schooling and exhibited behaviour problems such as bullying, fighting truancy, stealing and drug abuse. Likewise, the study revealed that student teachers had serious difficulties keeping the class quiet and on task, as some of the learners were disrespectful, stubborn, disruptive and threatened student teachers with violence as a result the student teachers felt powerless and belittled.

The study indicated that student teachers were instructed to reduce the number or completely remove learning centres from the classrooms so as to create enough space for physical social distancing, however, some supervisors, especially college lecturers penalized student teachers for that because learning centres are a requirement so student teachers were confused, discouraged and frustrated. The study also established that splitting of classes and hot sitting which were put in place to curb the spread of the COVID-19 pandemic caused work overload which made the student teachers on teaching practice find time management to be very difficult. It was established that the Ministry of Primary and Secondary Education took long to replace teachers who died due to COVID-19 leaving student teachers to teach large classes on their own. The study uncovered that student teachers were so overwhelmed with work to an extent that they failed to get time to prepare meals, socialize, collect media and update class records. The study found that due to work overload there was a lack of work-life balance and student teachers were overwhelmed with work a situation which was a challenge to student teachers' resilience.

#### ***5.3.2.2 Teaching practice supervision in the COVID-19 era.***

The findings from this study found that teaching practice supervision by both school-based supervisors and college-based supervisors was erratic, inconsistent and lacked thoroughness as the supervisors were afraid of contracting the COVID-19 virus. It was established that due to erratic supervision as a result of travel restrictions imposed to curb the spread of COVID-19 and lack of thoroughness student teachers did not get adequate instructional support and feedback which hindered student teachers' resilience due to a lack of teaching competencies, confidence and professional growth. The results of the study indicated that college lecturers' visits were unannounced and they came as a surprise attack which caused panic, shock and nervousness in student teachers. In addition, the study found that newly appointed lecturers needed thorough induction on teaching practice supervision to avoid conflicting comments by the lecturers and irregularities in mark allocation which left the student teachers confused and demoralized. Furthermore, this study uncovered that the majority of the participants felt that college lecturers and school-based supervisors should hold workshops on college expectations and interpretation of teaching practice instruments to avoid too many deviations in the allocation of marks. Implicitly both school-based supervisors and college-based supervisors should be well acquainted with professional teacher training and should be performance experts competent enough to assess student teachers on teaching practice.

It emerged from this study that online teaching practice supervision could not be carried out due to a host of challenges which included lack of internet connectivity, high cost of WIFI and data bundles, and lack of compatible gadgets and electricity. The study uncovered that both college-based and school-based supervisors lacked technological knowledge on how to use e-learning platforms such as Google Class and Zoom for teaching practice supervision. Furthermore, the study indicated that most of the supervisors resisted change and had a negative attitude towards online teaching practice supervision, however, most participants felt that the COVID-19 situation was the new normal and supervisors should adapt to change. It emerged from this study that COVID-19 robbed the student teachers of the effective teaching practice supervision they were supposed to get because effective teaching practice supervision is important in teaching skills acquisition which helps to boost the confidence of the student teachers.

### **5.3.3. Response to research question 3: What personal and contextual resources contribute to resilience outcomes in student teachers on teaching practice in COVID-19 era in Masvingo District, Zimbabwe?**

*Objective: To explore the personal and contextual resources that contribute to resilience outcomes in student teachers on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe.*

#### **5.3.3.1 Personal resources**

The research question sought to explore the personal and contextual resources that promote resilience outcomes in student teachers on teaching practice in the COVID-19 era. The study established that while there are several risk factors that hinder the resilience of student teachers in the COVID-19 era, there are a number of protective factors that help student teachers overcome the challenges. It was found that personal resources such as emotions, motivation, self-efficacy, social competence and pedagogical content knowledge contribute to resilience outcomes in student teachers on teaching practice during COVID-19.

#### **5.3.3.2 Influence of emotions on resilience**

It was established that student teachers employed a number of strategies to promote their emotional wellbeing such as being humorous, cracking jokes, team work, seeking advice,

singing, dancing, taking a walk, praying, fasting, and playing games on smartphones. The study uncovered that most of the student teachers were able to identify and discard negative emotions such as anger, frustration, and feelings of hopelessness and despair. The findings of this study revealed that most student teachers accepted the COVID-19 situation as the new normal and were vaccinated against COVID-19 which boosted their hopes for survival and promoted their emotional wellbeing. It can be posited that the above strategies employed by the student teachers helped relieve stress and burnout which contributed to their emotional wellbeing and resilience.

#### ***5.3.3.3 Influence of motivation on resilience***

It emerged from this study that most of the student teacher had a very strong intrinsic, altruistic and extrinsic occupational call which motivated them to pursue the teaching profession. The study indicated that the majority of the student teachers were motivated by the zeal to complete the Diploma in Education course, earn a living, passion for the job and empathy towards educating the young learners. Additionally, the study uncovered that the words of encouragement from fellow student, the student teachers' mentors, family members and friends motivated the student teachers to continue with teaching practice in the face of adversities caused by COVID-19. Data showed that most of the participants felt that teaching was a noble profession as such teachers were valued in society and there was hope for a better living through a career in teaching. It therefore can be postulated that a sense of optimism gave the student teachers the impetus to continue with teaching practice, hence they remained optimistic and resilient in the COVID-19 era.

#### ***5.3.3.4 Influence of Self-efficacy on resilience***

It emerged from this study that at the beginning of their teaching practice student teachers' self-efficacy was low due to lack of teaching techniques, lack of classroom management skills and anxiety caused by the fear of contracting the COVID-19 pandemic. The study found that through working with experienced school administrators and student teachers' mentors, verbal persuasions from student teachers' mentors, fellow students, family members and friends, the student teachers gained mastery and vicarious experience which promoted their self-efficacy. Data showed that the student teachers' mentors acted as role models on teaching strategies, student engagement and classroom management and through vicarious experience, the student

teachers gained mastery experience for instructional strategies, student engagement, and classroom management in line with the COVID-19 protocols. It was established that most student teachers felt a sense of pride that they were in control of the situation which boosted their self-esteem, self-efficacy and resilience.

#### ***5.3.3.5 Influence of social competence on resilience***

The study established that most of the student teachers were socially competent and did not mask emotions in the face of adversities caused by COVID-19. The study uncovered that despite COVID-19 restrictions student teachers demonstrated healthy strategies such as socializing, freely asking for help or advice, helping others, as well as sharing ideas with fellow students, student teachers' mentors, family members and friends and communicating with relatives and friends through WhatsApp, they stayed connected and felt that they were home away from home. The study showed that these healthy strategies helped student teachers maintain their social competence, make friends and maintain a home work-life balance which contributed to their emotional wellbeing, engagement and job satisfaction under adverse conditions imposed by the COVID-19 pandemic. It therefore be opined that courage; and social and emotional competence are protective factors that promote resilience in student teachers on teaching practice in the COVID-19 era.

#### ***5.3.3.6 Influence of pedagogical content knowledge on resilience***

The findings from this study indicated that student teachers got support from the student teachers' mentors and school administrators in the development of pedagogical content knowledge since the college had not fully prepared the student teachers for teaching practice due to early closures caused by the COVID-19 pandemic. The study found that personal teaching abilities, a positive attitude and reflection ability were internal resources which promoted the pedagogical content knowledge of student teachers on teaching practice in the COVID-19 era. In addition, the study indicated that with the assistance of student teachers' mentors, fellow student teachers and school administrators the student teachers developed pedagogical content knowledge and they felt empowered, and believed in their abilities to teach which helped them to experience energy, creativity and courage to face teaching practice challenges induced by COVID-19. The study further indicated that although the development of pedagogical content knowledge promoted resilience of student teachers, the lack of technological pedagogical content

knowledge was a threat to resilience of student teachers especially during school closures when face-to-face teaching was transferred to online learning. The study uncovered that technological pedagogical content knowledge was lacking in student teachers because student teachers not prepared for online pedagogical content knowledge at college level.

#### ***5.3.4. Relational resilience as a contextual resource***

It emerged from this study that relational resilience was informed through strong, mutual and trusting relationships between student teachers and school administrators, student teachers and student teachers' mentors, student teachers and college lecturers, student teachers and the learners, student teachers and parents from the community. It was established that cordial relationships were very crucial and enabled for student teachers on teaching practice in the COVID-19 era to navigate challenging situations.

##### ***5.3.4.1 Relationship between student teachers and school administrators***

The study established that most school administrators had professional, warm and friendly relationships with the student teachers so they gave them advice on professionalism, and instructional strategies which adhered to COVID-19 protocols, recognized student teachers as staff members, invited them to staff meetings, assigned them duties and responsibilities and also gave some incentives for a job well done. It emerged from this study that most school administrators were concerned with the health of the student teachers so they encouraged the student teachers to be vaccinated against COVID-19. The study found trust there were some elements of trust, autonomy and collegiality between the student teachers and the school administrators which promoted the resilience of student teachers on teaching practice in the COVID-19 era.

##### ***5.3.4.2 Relationship between student teachers and student teachers' mentors.***

The findings of the study indicated that in most cases there existed warm and cordial relationships between the student teachers and student teachers' mentors. It was established that student teachers' mentors were a pillar of strength for the student teachers as they were always there for the student teachers in times of need, and were instrumental in advising student teachers on how to avoid conflicts and maintain good relationships with workmates. Findings from this study revealed that student teachers' mentors treated student teachers with respect, and gave unconditional emotional, moral and social support which boosted the student teachers' self-

esteem and psychological wellbeing. The study uncovered that there existed elements of trust, mutuality, autonomy and collaboration between the student teachers and the student teachers' mentors, factors which cultivated the resilience of student teachers on teaching practice in the COVID-19 era.

#### ***5.3.4.3 Relationship between student teachers and fellow student teachers***

The study established that in most cases student teachers enjoyed warm, trusting and cordial relationships. Emerging from this study is the view that student teachers were in good books as they helped each other solve social, financial and professional work challenges. In addition, the study indicated that there was team work, collaboration, and unity of purpose among the student teachers as a result of the good relationships which existed among them. It was established that most of the student teachers were friendly, cooperative, and helpful and encouraged each other to be vaccinated against COVID-19. It was established that the student teachers worked as a team, contributed some money when one of them fell sick due to the COVID-19 virus or was bereaved. It can be posited that the sound relationships which existed among the student teachers created hope, boosted their morale in hard times, developed their courage to face teaching practice challenges induced by the COVID-19 pandemic.

#### ***5.3.4.4 Relationship between Student teachers and college lecturers***

The findings from this study indicated that in most cases there was a very good rapport between the college lecturers and the student teachers as they treated each other in a friendly, respectful and in professional manner. It was established that most of the lectures treated student with dignity, gave constructive advice on how to solve social issues, conflict resolution, the need to protect oneself and the learners against COVID-19 by giving them advice on different teaching strategies which did not spread the COVID-19 virus. Implicitly there was mutuality and empowerment which boosted the student teachers' courage to face the day-to-day challenges of teaching profession and enhanced the resilience of student teachers during COVID-19.

#### ***5.3.4.5 Relationship between student teachers and learners***

It emerged from this study that most learners were friendly, respectful, trustworthy, disciplined, and cooperative except for a few who exhibited behaviour problems such as truancy and disrespect. The study found that due to sound relationships between the student teachers and the learners, most learners participated actively when the student teacher was under supervision so as

to help the student teacher score high marks, most learners volunteered to sweep the classroom, arrange books and help the student teacher to make and collect teaching and learning media. The sound and mutual relationships between the student teachers and the learners developed the student teachers' self-efficacy and promoted their sense of agency, engagement and job satisfaction.

#### ***5.3.4.6 Relationship between student teachers and parents from the community***

The study established that most parents from the community were very supportive of the student teachers, cooperative, friendly and respectful because student teachers sacrificed to teach their children despite the outbreak of the COVID-19 pandemic. The study found that the parents from the community cooperated by providing learners with stationery and masks and in most cases parents from the community gave student teachers first preference to fetch water from the boreholes. Most student teachers were happy to be respected by members of the community which boosted their feelings of being accepted and loved by the community members. The findings from this study indicated that there was mutuality between the student teachers and parents from the community which is critical for enhancing resilience of student teachers on teaching practice in the COVID-19 era.

#### ***5.3.4.7 Coping strategies used to promote resilience***

The findings from this study indicated that student teachers used behaviour coping strategies and social networking strategies such as seeking advice, socializing, helping others, praying, setting realistic goals and concentrating on their work so as to buffer themselves against the negative demands imposed by the COVID-19 pandemic. It emerged from this study that despite the outbreak of the COVID-19 pandemic, student teachers concentrated on their work, had passion for teaching and enjoyed teaching the learners. The study uncovered that most student teachers socialized with their parents, friends and colleagues through WhatsApp and Facebook so they break the physical barriers created by the lockdowns due to the COVID-19 pandemic. It was established that most of the student teachers were able to control their emotions through, being humorous, sociable, praying, forming WhatsApp prayer groups, singing, dancing and some even cried to release bad emotions. Additionally, it was established that strategies such as humour promote positive emotions which enabled student teachers to endure negative emotions and gain a sense of emotional control. Furthermore, the study found that effective communication with

parents, colleagues and the school community was an important strategy to promote resilience. It emerged from the study that student teachers engaged in help seeking behaviour, problem solving, social networking, being humorous, setting emotional boundaries, physical exercise, taking a walk and accepting the realities of the COVID-19 situation and live positively, these strategies enabled student teachers to feel secure, take risks and enabled autonomy which promoted their resilience on teaching practice in the COVID-19 era.

### **5.3.5 Response to research question 4: What kind of support do student teachers on teaching practice receive in the COVID-19 era in Masvingo District, Zimbabwe**

*Objective: To determine the kind of support that student teachers receive on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe.*

The research question sought to determine the support student teachers receive on teaching practice in the COVID-19 era. Findings from this study established student teachers receive different kinds of support which promote their resilience on teaching practice in the COVID-19 era, namely, instructional support (teaching strategies, lesson execution, class/classroom management, record keeping) emotional support (trust, caring, empathy, love, acceptance, being emotionally present when a person needs a friend) instrumental support, that is, helping behaviour (loaning money, providing material needs, helping in a difficult situation, spending time together) informational support, that is providing knowledge or advise to someone (giving insights on how to solve a problem, providing information, advises) and appraisal support, that is evaluative feedback and rewards (giving verbal affirmation, praises, constructive critique, giving feedback regarding progress).

#### **5.3.5.1 Support given to student teachers by school administrators**

It emerged from the study that school administrators gave student teachers instrumental support in the form of masks, sanitizers and stationery though they were inadequate. The study found that the school administrators were approachable and friendly, provided social support and gave instructional support by spelling out the required standards of performance and also gave constructive feedback which helped student teachers go through their teaching practice and encouraged them to face the challenges of teaching with confidence. It was established that where school leaders encourage, support and establish the development of relationships based on respect, trust, care and integrity, student teachers appeared to flourish. The findings from this

study indicated that the majority of school administrators were concerned with the health of student teachers so they encouraged the student teachers to be vaccinated against COVID-19 however, most participants felt that the government should have set health facilities at each school for information dissemination, testing of COVID-19 and treatment of those who contracted the COVID-19 virus.

#### ***5.3.5.2 Support given to student teachers by student teachers' mentors***

The findings of this study established that student teachers' mentors provide their mentees with instructional support which relates to knowledge, teaching strategies and skills mentors develop in their mentees and psychological support which has to do with enhancing self-esteem, confidence and feelings of effectiveness. It emerged from this study that the majority of student teachers' mentors demonstrated and developed teaching competencies in student teachers on teaching practice, supervised student teachers and gave constructive criticism. It was found that student teachers' mentors demonstrated how to effectively use teaching methods which did not spread COVID-19 and helped in enforcing COVID-19 regulations. Most of the participants were of the view that student teachers' mentors and qualified teachers gave student teachers social, moral and financial support wholeheartedly resulting in the development of resilience of student teachers. The study established that student teachers' mentors play a critical supportive role, especially in terms of goal setting, enabling the development of reflective practices, modeling effective teaching strategies, giving feedback and guiding mentees. Furthermore, the study uncovered that providing support to student teachers on teaching practice helped student teachers develop the confidence to take risks and experiment with new approaches in the classroom.

#### ***5.3.5.3 Support given to student teachers by college lecturers***

Research findings indicated that college lectures held discussions with the student teachers and student teachers' mentors to give appraisals and feedback on the strengths and grey areas observed during supervision. Most participants felt that the discussions were very educative and fruitful as they helped student teachers improve their teaching competencies. It was established that college lecturers gave student teachers hints and tips on how to deal with the COVID-19 pandemic during the teaching and learning episodes. The findings of this study showed that the majority of participants felt that student teachers received valuable advice on how to pass teaching practice external examining which the student teachers feared the most. It emerged that

most of the participants were of the view that the college should have donated masks and sanitizers to student teachers, reduced teaching practice fees to alleviate economic hardships, provided data bundles, visited student teachers who contracted COVID-19 and provided counseling services as the student teachers were subjected to fear and anxiety due the outbreak of COVID-19. Findings from this study found that feedback was essential and valuable for student teachers because it contributes to increasing their level of confidence and self-efficacy, which are the characteristics of a resilient student teacher.

#### ***5.3.5.4 Support given to student teachers by fellow student teachers***

It emerged from the research findings that in most cases student teachers gave each other genuine support in order to soldier on with teaching practice in the COVID-19 era. The study uncovered that the majority of student teachers were very cooperative and shared ideas on record keeping, lesson execution, and how to adhere to COVID-19 regulations. Findings from this study indicated that student teachers shared information, ideas, media, food items, gave each other advice on social, professional and health matters especially related to COVID-19 pandemic. The study found that the majority of the student teachers did team work on classroom management, that is making and displaying of charts and concrete media and setting of learning centres. Most student teachers provided fellow student teachers with instructional, moral, social, spiritual and financial support. It was found that a few student teachers were not cooperative, they were selfish and reserved. Research findings are suggestive of the view that support from fellow student teachers is vital in keeping the student teachers soldiering on with teaching practice in COVID-19 era.

#### ***5.3.5.5 Support given to student teachers by the community***

The study established that most of the community members were very helpful, respectful and friendly except for a few adolescents who threatened student teachers with violence. It emerged from this study that most of the community members were cooperative in providing the learners with masks, sanitizers and stationery. In addition, the study indicated that the majority of student teachers received instrumental support in the form of food stuffs such as vegetables, mealie meal and tomatoes from the community members and in some cases the community offered security services at the schools. It can be posited that support from the members of the community is instrumental in the development of the resilience of student teachers in the COVID-19 era.

#### ***5.3.5.6 Support given to student teachers through social media***

It emerged from this study that student teachers got informational support from social media such as notes on safe methods to use that could prevent the spread of COVID-19, updates on the prevalence of COVID-19, awareness campaigns on vaccination, lockdown updates. It was established that student teachers received information on ways of preventing and treating COVID-19 using natural herbs such as ‘*zumbani*’ and steaming. The study found that informational support from social media helped student teachers to use safe teaching methods and get vaccinated, hence they felt safe from contracting the COVID-19 virus so they became more confident.

#### ***5.3.5.7 Support given to student teachers by family members and friends***

Findings from this study indicated that student teachers received financial, emotional, and spiritual support (prayers) from their families and friends. The study found that receiving instrumental support (for example, some money) and emotional support (for example, in terms of expression of affection, encouragement, and attention) from parents, siblings and friends contributed to diminished feelings of anxiety as the student teachers realized that their families and friends loved and cared for them which resultantly promote their resilience on teaching practice in the COVID-19 era.

#### ***5.3.5.8 Support given to student teachers by the donor community***

The findings of this study indicated that very few schools received support from the donor community in the form of fumigation chemicals, masks, food hampers and sanitary wear however in such cases the student teachers were grateful and felt relieved as the donations helped to curb the spread of the COVID-19 virus. The study indicated that instrumental support plays an important part in the psychological wellbeing of student teachers since it acts as a mediator of life stress.

#### ***5.3.5.9 Developing resilience in teacher education***

It was established that the teacher education curriculum focuses mainly on academic subjects, teaching methods and class/classroom management at the expense of student teachers’ psychological wellbeing. The findings of this study indicated that the college should mentally prepare student teachers for teaching practice challenges by developing in them problems solving

skills, how to establish relationships and promote positive emotions. It emerged from the findings that most of the participants believed that the teacher education curriculum in Zimbabwe should introduce a resilience subject so as to nurture and develop resilience in student teachers in order for them to be ready to meet the demands of a plethora of teaching practice challenges exacerbated by the outbreak of COVID-19. In addition, this study indicated that the teacher education curriculum in Zimbabwe should introduce a resilience subject, entitled, for example, 'Challenges and Solutions to Teaching Practice Challenges' or 'Life Skills – Challenges and Solutions on Teaching Practice' or 'Challenges Encountered on Teaching Practice and their possible solution' or 'How Student Teachers Survive Teaching Practice'. The study recommended that student teachers should be thoroughly trained on how to use e-learning prior to teaching practice to avoid technological shock and also that the teacher education programme should develop resilience in student teachers prior to teaching practice. Findings from this study indicated that resilience related skills and strategies can be enhanced during pre-service teacher education.

#### **5.4 Summary of main findings**

- The thematic findings revealed that student teachers on teaching practice in the COVID-19 era are subjected to teaching practice stressors induced by COVID-19 pandemic such as fear of contracting the COVID-19 virus, illness, isolation, stigmatisation and death, anxiety, uncertainty, hopelessness, economic hardships, prolonged teaching practice period, school closures, and transference of face-to-face teaching to online learning. The study uncovered that student teachers were at a very high risk of contracting the COVID-19 virus due to the shortage of personal protective clothing, shortage of masks and sanitizers, shortage of fumigation chemicals, overcrowded classrooms due to high pupil-teacher ratio and lack of knowledge on how to enforce the COVID-19 regulations. Thus, the fear of being infected by the COVID-19 virus greatly affected the psychological, intellectual, and emotional wellbeing of the student teachers. The results indicated that student teachers suffered from economic hardships due to the extension of the teaching practice period as the government ceased their teaching practice allowances at the expiry of the three-term period, and also the college made student teachers to pay teaching practice fees for the extra term.

- It emerged from this study that lack of teaching competencies, poor relationships, behaviour problems, class and classroom management, work overload and erratic teaching practice supervision hinder the resilience of student teachers on teaching practice in the COVID-19 era. The study uncovered that student teachers lacked teaching competencies because they were ill-prepared for teaching practice due to the disruption of learning activities caused by COVID-19 pandemic. Findings indicated that that student teachers were stressed, depressed and lost confidence in their ability to teach when the learners failed to grasp the concept and also due to their inability to enforce COVID-19 regulations such as proper wearing of masks and maintaining physical social distancing in the classroom.
- Furthermore, the study revealed that student teachers lacked content knowledge of the newly introduced subjects of the primary school curriculum such as Visual and Performing Arts (VPA), Family Religion and Moral Education (FAREME), Heritage Social Studies (HSS) and that there was a mismatch between what is taught at college and situation obtaining in the schools. The results of this study revealed that there is a need for curriculum harmonization so that what is taught to student teachers at college goes hand in hand with the subjects taught in the schools to enhance the student teachers' teaching competencies and confidence.
- The thematic findings indicated that e-learning had a plethora of challenges such as lack of internet connectivity, lack of electricity and constant power cuts, and lack of compatible gadgets such as laptops, smartphones, expensive WIFI and data bundles. In addition, the study indicated that the student teachers lacked technological pedagogical content knowledge on how to use e-learning platforms such as Zoom, Google Class and Microsoft Teams as they were not prepared to use online learning while in college due to early closures and disruption of learning activities as a result of the COVID-19 pandemic. Implicitly the use of e-learning caused a lot of stress and anxiety on the part of student teachers as they lacked the pre-requisite technological skills and technological pedagogical content knowledge. Furthermore, the study indicated that due to a lack of internet infrastructure and lack of knowledge of online learning student teachers could not complete teaching practising their placement schools within the stipulated three terms due to under supervision and lack of teaching practice external examining

- Findings from this study indicated that most schools were not prepared for reopening due to pre-existing challenges of infrastructure, lack of finance to buy sanitizers, masks, additional furniture, and fumigation chemicals and lack of replacement of qualified teachers who had died due to COVID-19. The thematic findings indicated that when schools finally re-opened, a staggering of classes, hot sitting or splitting of classes were put in place so as to decongest the classroom in order to maintain social distancing. These measures resulted in student teachers having to teach two sessions daily which resulted in work overload, student teachers had no time to rest, prepare meals or socialize. Student teachers were overwhelmed with work and lacked work-life balance that they suffered from isolation, fatigue, headaches, high blood pressure and forgetfulness which affected their health, physical and mental wellbeing.
- Regarding to the factors that hinder the resilience of student teachers on teaching practice in COVID-19 era, research findings revealed that factors such as lack of teaching competencies, negative relationships, behaviour problems, work overload and adjustment of classroom organisation were a hindrance to the resilience of student teachers on teaching practice during COVID-19. It was established that professional work challenges like poor relationships with school administrators, student teachers' mentors, college lecturers, and learners and complaints by parents hindered resilience of student teachers on teaching practice in the COVID-19 era. The study found that due to poor relationships, student teachers were dehumanized, degraded, humiliated and did not get instructional support thereby hindering their resilience on teaching practice in COVID-19 era. In addition, the study indicated that some school administrators, student teachers' mentors and college lectures did not want to relate to student teachers who once contracted the COVID-19 virus as they isolated, shunned and stigmatized the student teachers which negatively affected their social and psychological wellbeing, hence the lack of mutuality and trusting relationships hindered the development of resilience of student teachers on teaching practice in the COVID-19 era.
- The study established that due to prolonged school closures caused by COVID-19, some learners developed a negative attitude towards schooling and exhibited behaviour problems such as bullying, fighting truancy, stealing and drug abuse, so student teachers had serious difficulties keeping the class quiet and on task, as some of the learners were

disrespectful, stubborn, disruptive and threatened student teachers with violence as a result the student teachers felt powerless and belittled. The study indicated that student teachers were instructed to reduce the number or completely remove learning centres from the classrooms to create enough space for physical social distancing, however some supervisors, especially college lecturers penalized student teachers for that because learning centres are a requirement so student teachers were confused, discouraged and frustrated.

- The thematic findings established that teaching practice supervision by both school-based supervisors and college-based supervisors was erratic, inconsistent and lacked thoroughness as the supervisors were afraid of contracting the COVID-19 virus. It was established that due to erratic supervision as a result of travel restrictions imposed to curb the spread of COVID-19 and lack of thoroughness student teachers did not get adequate instructional support and feedback which hindered student teachers' resilience due to a lack of teaching competencies, confidence and professional growth. The results of the study indicated that college lecturers' visits were unannounced and they came as a surprise attack which caused panic, shock and nervousness in student teachers. In addition, the study found that newly appointed lecturers and school-based supervisors needed thorough induction on teaching practice supervision to avoid conflicting comments and irregularities in mark allocation which left the student teachers confused and demoralized.
- This research found that personal and contextual resources promote resilience in student teachers on teaching practice in COVID-19 era. The study established that contextual support from stakeholders cultivates the resilience of student teachers on teaching practice during COVID-19 pandemic. It was established that student teachers employed a number of strategies to promote their emotional wellbeing such as being humorous, cracking jokes, team work, seeking advice, singing, dancing, taking a walk, praying, fasting, and playing games on smart phones. It was found that most of the student teachers were able to identify and discard negative emotions such as anger, frustration, feelings of hopelessness and despair, thus they accepted the COVID-19 situation as a new normal.

- It emerged from this study that most of the student teacher had a very strong intrinsic, altruistic and extrinsic occupational call which motivated them to pursue the teaching profession. The study indicated that the majority of the student teachers were motivated by the zeal to complete the Diploma in Education course, earn a living, passion for the job and empathy towards educating the young learners. Additionally, the study uncovered that the words of encouragement and persuasion from fellow students, the student teachers' mentors, family members and friends motivated the student teachers to continue with teaching practice in the face of adversities caused by COVID-19.
- The study found that student teachers' self-efficacy developed through working with experienced school administrators and student teachers' mentors, verbal persuasions from student teachers' mentors, and fellow students, the student teachers gained mastery experience and vicarious experience which promoted their self-efficacy. Data showed that the student teachers' mentors acted as role models on teaching strategies, student engagement and classroom management and through vicarious experience, the student teachers gained mastery experience for instructional strategies, student engagement, and classroom management in line with the COVID-19 protocols. Results of the study indicated that self-efficacy boosted confidence and resilience in student teachers.
- The thematic findings indicated that with the assistance of student teachers' mentors, fellow student teachers and school administrators the student teachers developed pedagogical content knowledge and they felt empowered, and believed in their abilities to teach which helped them to experience energy, creativity and courage to face teaching practice challenges induced by COVID-19. The study further found that although the development of pedagogical content knowledge promoted resilience of student teachers, the lack of technological pedagogical content knowledge was a threat to the resilience of student teachers especially during school closures when face-to-face teaching was transferred to online learning as a measure of curbing the spread of the COVID-19 virus.
- It was found that the study indicated that with the assistance of student teachers' mentors, fellow student teachers and school administrators the student teachers developed pedagogical content knowledge and they felt empowered, and believed in their abilities to teach which helped them to experience energy, creativity and courage to face teaching practice challenges induced by COVID-19. The study further indicated that although the

development of pedagogical content knowledge promoted resilience of student teachers, the lack of technological pedagogical content knowledge was a threat to resilience of student teachers especially during school closures when face-to-face teaching was transferred to online learning.

- It emerged from this study that relational resilience was informed through strong, mutual and trusting relationships between student teachers and school administrators, student teachers and student teachers' mentors, student teachers and college lecturers, student teachers and the learners, student teachers and parents from the community. It was established that cordial relationships were very crucial and enabled student teachers on teaching practice in the COVID-19 era to navigate challenging situations. The study found that there were some elements of trust, autonomy, collaboration and collegiality between the student teachers and various stakeholders which promoted the resilience of student teachers on teaching practice in the COVID-19era. Findings from this study revealed that student teachers were treated with respect, and were given unconditional emotional, morale and social support which boosted the student teachers' self-esteem and psychological wellbeing.
- The findings from this study indicated that student teachers used behavioural coping strategies and social networking strategies such as seeking advice, socializing, helping others, praying, setting realistic goals and concentrating on their work so as to buffer themselves against the negative demands imposed by the COVID-19 pandemic. The study found that most student teachers socialized with their parents, friends and colleagues through WhatsApp and Facebook so they broke the physical barriers created by the lockdowns due to the COVID-19 pandemic. It was established that most of the student teachers were able to control their emotions through, being humorous, sociable, praying, forming WhatsApp prayer groups, singing, dancing and some even crying to release bad emotions, thus effective communication was an important strategy to promote resilience. It emerged from the study that student teachers engaged in help-seeking behaviours, problem-solving, social networking, being humorous, setting emotional boundaries, physical exercise, taking a walk and accepting the realities of the COVID-19 situation and live positively, these strategies enabled student teachers to feel secure, take

risks and enabled autonomy which promoted their resilience on teaching practice in the COVID-19 era.

- The thematic findings from this study established student teachers received different kinds of support which promoted their resilience on teaching practice in the COVID-19 era, namely, instructional support (teaching strategies, lesson execution, class/classroom management, record keeping) emotional support (trust, caring, empathy, love, acceptance, being emotionally present when a person needs a friend) instrumental support, that is, helping behaviour (loaning money, providing material needs, helping in a difficult situation, spending time together) informational support, that is providing knowledge or advise to someone (giving insights on how to solve a problem, providing information, advises) and appraisal support, that is evaluative feedback and rewards (giving verbal affirmation, praises, constructive critique, giving feedback regarding progress). It was found that student teachers received support from various stakeholders, namely, school administrators, student teachers' mentors, college lecturers, fellow student teachers, learners, social media, family members and friends; however, it was found that most student teachers did not benefit from the donor community. The study indicated that support plays an important part in the psychological wellbeing of student teachers on teaching practice in the COVID-19 era since it acts as a mediator of life stress and promote resilience.
- It was found that the teacher education curriculum focuses mainly on academic subjects, teaching methods and class/classroom management at the expense of student teachers' psychological wellbeing. It emerged from the findings of this study is the view that the teacher education curriculum in Zimbabwe should introduce a resilience subject so as to nurture and develop resilience in student teachers in order for them to be ready to meet the demands of a plethora of teaching practice challenges exacerbated by the outbreak of COVID-19. The study recommended that student teachers should be thoroughly trained on how to use e-learning prior to teaching practice to avoid technological shock and also. The thematic findings from this study indicated that resilience related skills and strategies can be enhanced during pre-service teacher education.

### 5.4.1 A model of Pre-service Teacher Resilience

In this section of the study a pre-service teacher resilience conceptual model is proposed as a guideline for stakeholders involved in pre-service teacher education so that they can develop capacity for resilience in student teachers prior to teaching practice. The pre-service resilience model is a derivation from both existing literature and data collected by the researcher. The resilience theory forms the bedrock of the model pioneered by Norman Garnezy, Lois Murphy, Michael Rutter, & Emmy Werner, supported the socio-ecological theory (Bronfenbrenner, 2005) and the cultural relational theory (Jordan 2006). Resilience theory has its origins in the study of adversity and how adverse life experiences impact harmfully on people (Van Breda, 2018). As stated by Jordan (2006) the relational-cultural theory “is a theory about our basic interconnectedness about the inevitability of needing one another throughout our lives” which resonates well with the findings of studies on resilience. Jordan (2006) maintains that growth-fostering connections are characterized by mutuality, empowerment and the development of courage. The theoretical underpinning of the social-ecology of resilience emerged from Bronfenbrenner’s (1979) ground-breaking work on human development throughout the life span (Wosnitza, et al., 2018). The social-ecological systems theory describes how human development is influenced by different types of environmental systems (Attekel & Mahoney, 2017). Data collected by the researcher revealed the risks, protective factors and ways that could be used to develop the capacity for resilience in student teachers prior to teaching practice. Findings of this study resonated with earlier studies (Gu and Day, 2013; Johnson, et al., 2014) who claimed that teachers’ capacity to deal with challenges related to the teaching profession requires resilience which is particularly important for student teachers.

Figure 5.4.2 represents a proposed model of pre-service teacher resilience. It could be used by teacher educators to develop capacity for resilience in student teachers prior to teaching practice so that they become psychologically ready to face a host of teaching practice challenge inherent in the teaching profession which may be exacerbated by pandemics, for example COVID-19 or natural disasters, for example, cyclones, or man-made disasters, for example, civil wars. The proposed pre-service teacher resilience model comprises adversities/ risks, personal and contextual resources, contextual support, strategies and the resilience outcomes. The proposed model could be referred to by the acronym ARRSSO model that is; (**A**) adversity, (**R**) risks, (**R**) resources, (**S**) support (**S**) strategies (**O**) outcomes. The bi-directional arrows in Figure 5.4.2

illustrate that the resilience process may not necessarily be rectilinear, but that resources, support and strategies interact with each other in rotations over time, before resulting in resilience outcomes. The resilience theory consists of three central constructs: (1) risk factors (2) protective factors (3) vulnerability factors (Bolton *et al.* 2017) and these three central factors are conceptualized as related and they interact over time during the process of resilience, the ARRSSO model is underpinned by the resilience theory.

#### **5.4.1.1 Adversity/ risk factors**

In this research risk factors refer to events of adversity or conditions of vulnerability (Smith-Osborne, 2007 cited in Bolton, *et al.*, 2017). The current study found that adversity/ risk factors militate against the resilience of student teachers on teaching practice in the COVID-19 era, namely, individual risk factors (negative self-beliefs, reluctance to seek help, lack of confidence, timidity, anxiety) contextual risk factors (pandemics, behaviour management, heavy workloads, lack of resource, difficulty class/school), classroom/ school context challenges (classroom management, social isolation, disruptive students, unsupportive school administration/staff), professional work challenges (curriculum knowledge, pedagogical content knowledge, technological pedagogical content knowledge, poor funding, low teaching practice allowances, lack of time, unsupportive or no mentor). Findings from this study indicated that it is critical, therefore, that teacher educators and student teachers be able to identify the risk factors that may hinder the resilience of student teachers during teaching practice. Garmerzy (1991) validated this finding and stated that risk factors appear to have cumulative effect, reducing qualities of engagement, psychological wellbeing and job satisfaction.

#### **5.4.1.2 Protective factors**

In this research study, protective factors generally refer to personality characteristics and environmental resources that aid in preventing maladjustment (Smith-Osborne, 2007 cited in Bolton. *et al.*, 2017). Protective factors are associated with adaptive functioning in the face of adversity (Graber, Pichon & Carabine, 2015). Most of the early resilience researchers conceptualize protective factors at three levels, namely, the individual, the family and the community (Vic Health, 2015). The thematic findings indicated that there are a number of protective factors that prevent maladjustment and promote the resilience of student teachers on teaching practice in the COVID-19 era. These protective factors range from personal protective

factors (emotions, motivation, self-efficacy, social competence, optimism), contextual resources (relationships, support networks/social-ecological systems), contextual support (instructional support, instrumental support, emotional support, informational support, appraisal support, spiritual support) and strategies (humour, communication, problem solving, help seeking, faith practices, time management, goal setting, work-life balance). It was found that the protective resources, support and strategies interact overtime during the resilience process to so as to come up with resilience outcomes (commitment, job satisfaction, wellbeing, agency, engagement, enthusiasm). The findings of this study indicated that knowledge of the protective factors is of paramount importance to both teacher educators and the student teachers as they enable the development of the capacity for resilience in student teachers. Findings from this study concur with (Graber, Pichon & Carabine, 2015) who posited that protective factors such as parental support, secure attachment, mentoring relationships, supportive friends, academic resilience, and socio-economic status promote resilience in the face of adversity.

#### **5.4.1.3 Strategies**

The thematic findings indicated that student teachers used behavioral coping strategies and social networking strategies such as seeking advice, socializing, helping others, praying, setting realistic goals and concentrating on their work so as to buffer themselves against the negative demands imposed by the COVID-19 pandemic. Findings further revealed that most of the student teachers were able to control their emotions through, being humorous, sociable, praying, forming WhatsApp prayer groups, singing, dancing and some even crying to release bad emotions. Thieman, Max and Kitchel (2014) identified two theoretical approaches to teacher resilience, these are; the multidimensional approach in which personal and environmental factors merge to compose teacher resilience, and the strategic approach in which teacher resilience is a process of adaptation and different strategies are engaged. The knowledge of how to apply different coping strategies goes a long way in promoting resilience of student teachers on teaching practice in the COVID-19 era.

#### **5.4.1.4 Resilient Outcomes**

In the context of this study, resilience is the dynamic process whereby characteristics of individual student teachers and of their personal and professional contexts interact over time as student teachers use particular strategies to enable the outcome of a student teacher who

experiences professional engagement and growth, commitment, enthusiasm, satisfaction and wellbeing (Beltman, 2015). Through the implementation of the ARRSSO model for pre-service teacher resilience, the student teachers may develop a range of adaptive coping strategies (for example, problem solving, time management, and maintaining work-life balance) to manage challenges with a view to maximizing adaptive, resilient outcomes (for example commitment, job satisfaction, wellbeing, engagement) (Mansfield, *et al.*, 2016).

It was found that resilience involves several internal and external systems to the individual which is continually interacting with each other, so resilience involves individual characteristics, strategies or processes as well as multiple systems and contexts (Mansfield, *et al.*, 2016). Hence, teaching student teachers about these various systems, coping strategies and their impact on resilience helps develop the capacity for resilience in student teachers during pre-service teacher education

#### **5.4.1.5 Implications for ARRSSO model of pre-service teacher resilience.**

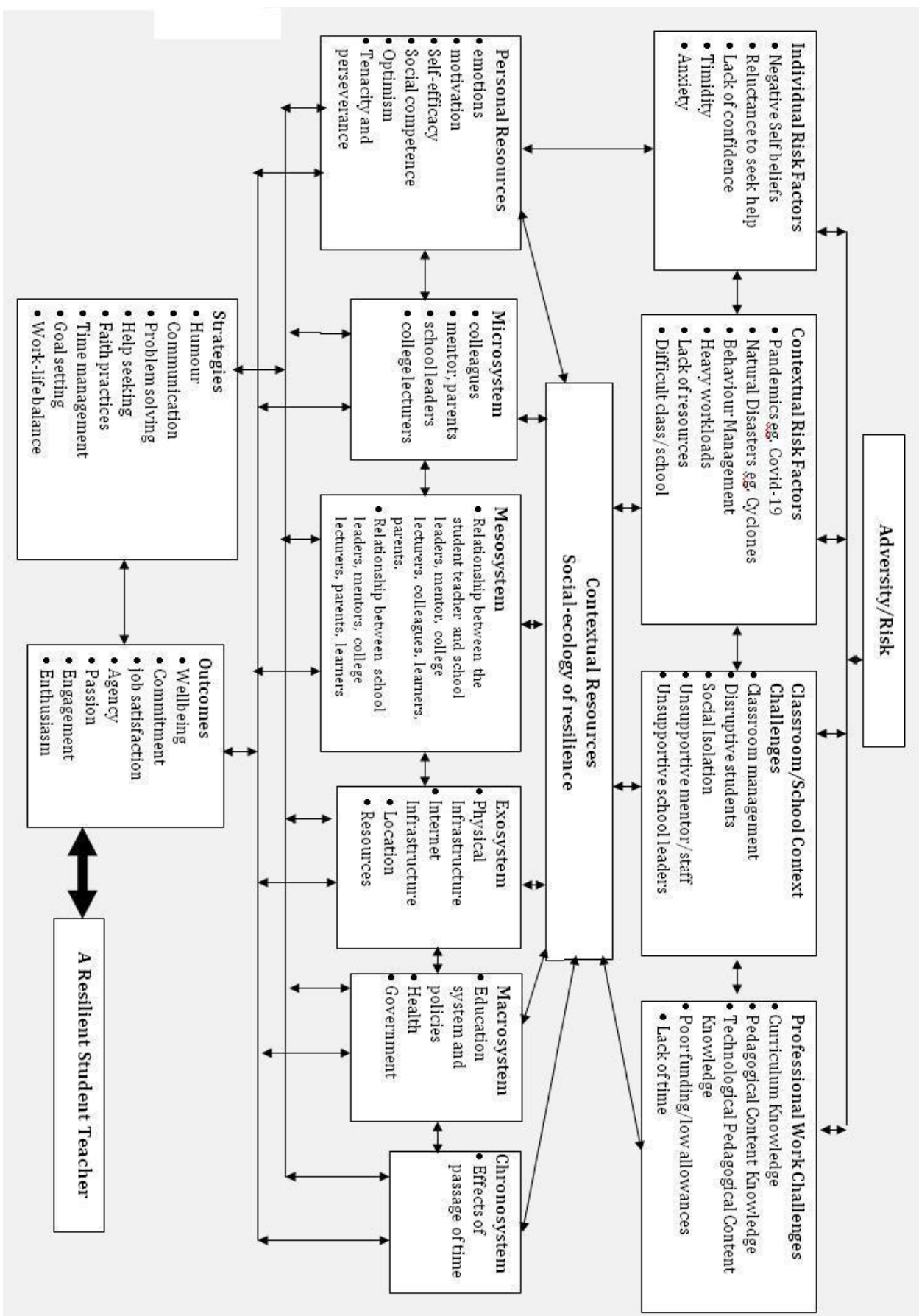
The proposed ARRSSO model of pre-service teacher resilience of much benefit to student teachers, the Ministry of Higher and Tertiary Education Innovation Science and Technology Development, the University of Zimbabwe, Department of Teacher Education, teacher educators, school administrators and student teachers' mentors. The thematic findings revealed that the teacher education curriculum in Zimbabwe focuses mainly on academic subjects, teaching methods and class/classroom management at the expense of student teachers' psychological wellbeing. The study recommended that the relevant authorities should consider introducing a subject on resilience in the teacher education curriculum, hence the need for a model of pre-service teacher resilience.

Teacher educators should make use of the proposed resilience framework to develop capacity for resilience in student teachers during their first residential phase in college prior to teaching practice. The proposed ARRSSO model of pre-service teacher resilience informs teacher educators of the most effective ways of promoting resilience in student teachers in the face of adversity. Attention should be paid to the risk factors, protective factors and individual strengths available to student teachers so as to foster adaptive functioning in the face of teaching practice adversities or risks. It is hoped that if student teachers have an awareness of protective

mechanisms of resilience promotion, it may lead to stress reduction, psychological, social and emotional well-being, commitment, job satisfaction, and improved physical and mental health.

Finally, the application of ARRSSO resilience framework to student teachers may develop capacity for resilience through building personal resources (for example, motivation, social and emotional competence), understanding ways to mobilize contextual resources (for example, relationships and support networks), and developing a range of adaptive coping strategies (for example, problem-solving, time management, maintaining work-life balance) to maximize adaptive, resilient outcomes (for example, commitment, job satisfaction, wellbeing, engagement) (Mansfield *et al.*, 2016).

Figure 5.4.2 A Model of Pre-service Teacher Resilience



## **5.5 Limitations of the study**

- The major constraint of this study was the limited access to the internet facilities due to constant power outages. This meant that a lot of time and monetary resources were wasted since the researcher had to travel thirty-five (35) kilometres to Masvingo Urban to access the internet at an institution which had solar energy as a backup. This militated against the researcher's time frame to complete some segments of this study. As measures to mitigate against this challenge, the researcher had to buy private data bundles though they were expensive and also had to work overnight to cover up for the lost time.
- In addition, time management proved to be a challenge since the researcher was a full-time lecturer at Morgenster Teachers College. It was a challenge to balance work demands such as lecturing, marking assignments and examinations, supervision of research, teaching practice supervision and executing my supervisory roles as the Head of the Teaching Practice Department. To create time for my research studies I had to take three months leave so that I could concentrate on my studies.
- The other constraint encountered in conducting this study was the issue of financial challenges brought about by the need to adhere to COVID-19 regulations during focus group discussions and semi-structured interviews. The researcher had to buy masks, gloves, sanitizers and fumigation chemicals. Each of the 27 participants was provided with gloves, sanitizers and masks and the researcher had to contract experts to fumigate the venues and furniture that was to be used for the focus group discussions and the interviews. The researcher had to make do with the meagre financial sources at his disposal; however, funding from the University of the Free State was of paramount importance since it went a long way in alleviating the financial constraints.

## **5.6 Contribution of the study**

This segment presents the potential contributions of this study. The study aimed to contribute the knowledge base and close the research gaps which were highlighted in Chapter One.

The study makes the following contributions:

### **5.6.1: Establishment of a Pre-Service Teacher Resilience Model**

- This study is the first of its kind in Zimbabwe to provide a comprehensive model for pre-service teacher resilience to demonstrate how the capacity for resilience could be developed in student teachers prior to teaching practice so that they become mentally ready to face teaching practice challenges inherent in the teaching profession. To provide a more profound understanding of how the capacity for resilience could be developed in student teachers during pre-service teacher education, the ARRSSO model made use of ideas from the resilience theory, Jordan's relational resilience theory and Bronfenbrenner's socio-ecological resilience theory.

### **5.6.2: Enhancement of Knowledge Among Teacher Educators in Strengthening Capacity and Resilience**

- The study contributes to the body of knowledge regarding the most effective ways teacher educators can develop the capacity for resilience in student teachers before teaching practice. The development of the capacity for resilience in student teachers may lead to stress reduction, psychological, social and emotional well-being, commitment, engagement, enjoyment, job satisfaction, and improved physical and mental health in student teachers. The development of resilience in student teachers will improve teacher quality, efficiency and effectiveness and avoid burnout.

### **5.6.3: Laying out a foundation serving as a spring-board for future studies.**

- The current study is the first attempt in Zimbabwe to explore student teachers' resilience on teaching practice in the COVID-19 era. The potential and vital contribution here lies in the commencement of an information base in the field that other researchers can draw from.

## **5.7 Recommendations**

The study could provide some insights for teacher education curriculum change and innovation; hence, the following recommendations for policy implementation are suggested:

- The research recommends that the Ministry of Higher and Tertiary Education, Innovation Science and Technology Development formulates and enacts policies that mandate the introduction of a compulsory subject on resilience in all teachers' colleges and

universities offering a degree or a Diploma in Education certificate. The recommendation emanated from the thematic findings of this study which indicated that student teachers on teaching practice were subjected to a host of adverse risks due to teaching practice stressors induced by the COVID-19 pandemic. It is of paramount importance, therefore, to develop a capacity for resilience in student teachers prior to teaching practice so that they are psychologically prepared to face teaching practice challenges and flourish in the face of adversity.

- The research recommends that the Ministry of Higher and Tertiary Education, Innovation Science and Technology Development together with the Ministry of Primary and Secondary Education formulate and enact policies that enable curriculum harmonization. The recommendation emanated from the findings of this research study which indicated that there was a mismatch between what is taught in teachers' colleges and the situation obtaining in the schools. Results of the study revealed that student teachers lacked content knowledge of the new subjects introduced in the primary school curriculum such as Visual and Performing Arts (VPA), Family Religion and Moral Education (FAREME) and Heritage Social Studies (HSS) a situation which was a hindrance to their resilience on teaching practice in the COVID-19 era. The current scenario is that the 2 ministries operate as separate entities as a result the Ministry of Primary and Secondary Education introduced the new curriculum without involving the Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development. There is need for these two ministries to work hand-in-glove to avoid a mismatch between what is taught in teachers' colleges and the curriculum being implemented in the primary schools.
- The research recommends that the government of Zimbabwe should enact policies that spearhead the development of Internet infrastructure in all schools and institutions of higher learning throughout the entire country. Efforts should be made to make sure the availability of electricity and WIFI, and the affordability of data bundles and compatible ICT gadgets. This recommendation emanated from the research findings that indicated that online learning during COVID-19 was a great challenge due to the lack of internet infrastructure in Zimbabwe. Due to economic hardships, lack of internet and infrastructure and the high cost of ICT gadgets, it may take long to implement this recommendation. The government, non-governmental organizations and stakeholders in

the education system should work together to fund the development of internet infrastructure. The shortage of electricity could be alleviated by installing solar backup systems in all the schools.

- The research further recommends that the Ministry of Higher and Tertiary Education, Innovation Science and Technology Development enact policies which mandate in-service training of college and university lecturers on Information Communication Technology (ICT) skills and proficiency in technological pedagogical content knowledge (TPCK). The recommendation emanated from the findings of this research study which indicated that college lecturers lacked ICT skills and TPCK so the implementation of e-learning and online teaching practice supervision was a challenge though it the only way out to continue with learning activities during COVID-19. Lack of ICT specialists and lack of money to set up efficient ICT infrastructure in colleges may hinder the in-service programmes. There is need therefore, for the government to fund the development of ICT infrastructure in colleges and employ ICT specialists whose mandate is to carry out the in-service programmes for lecturers and student teachers.
- Research studies on exploring the resilience of student teachers on teaching practice in the COVID-19 era are rare in Zimbabwe. This study recommends that an extension of the research work of this nature using quantitative or mixed methodologies could advance the knowledge base on understanding the resilience of student teachers on teaching practice in the COVID-19 era. Research work could also be extended to all primary and secondary teachers' colleges including universities which offer a diploma on degrees in education with the sole purpose of developing a wider knowledge base on how to develop the capacity for resilience in student teachers. Lack of funding of research studies in Zimbabwe may hinder the large-scale studies. The government should make an effort to fund research initiatives by academics
- In a move to expand the knowledge base on exploring student teachers' resilience on teaching practice in the COVID-19 era, this study recommends the use of comparative studies and longitudinal studies. A comparative study is ideal for identifying similarities and differences on issues influencing the resilience of student teachers while on teaching practice and merging them to create a solid knowledge base on how to develop and nurture resilience in student teachers. This study recommends the use of longitudinal

studies to explore the long-term effects of COVID-19 or other adversities on student teachers on teaching practice. There is need for the University of Zimbabwe through its curriculum transformation initiative to introduce a module on resilience in teachers' colleges.

- This study was conducted in the rural areas of Masvingo District, Zimbabwe involving 27 participants selected from Morgenster Teachers' College and 3 primary schools. The study employed a qualitative research design that calls for a smaller sample, thus results could not be generalized to a wider population. The size of the sample may seem small but Ritchie *et al.*, (2014) posit that samples in qualitative research are commonly small because of the homogeneous nature of the sample. Although the research findings are related to Morgenster Teachers College and Masvingo District primary schools, in Zimbabwe, recommendations are made for research work of this nature to be conducted in an urban setup. This would enhance the trustworthiness of the study and boost its credibility, dependability, confirmability and transferability. Cohen, *et al* (2018) and Mertens (2015) contend that qualitative studies do not seek generalisation but transferability of the research findings.
- The study recommended that a section of the teacher education curriculum should include a module or a subject on resilience. The recommendation originated from the research findings of this study that indicated that student teachers on teaching practice face a host of challenges inherent in the teaching profession which were exacerbated by the outbreak of COVID-19. Furthermore, the findings of this study established that capacity for resilience can be developed in student teachers during pre-service teacher education. The development of capacity for resilience in student teachers during pre-service teacher education may lead to stress reduction, psychological, social and emotional well-being, commitment, engagement, enjoyment, job satisfaction, and improved physical and mental health in student teachers, thereby improving teacher quality.
- The study recommended that teacher education should equip student teachers with current subject content knowledge and pedagogical content knowledge prior to teaching practice. The recommendation emanated from the findings of this study that indicated that student teachers were ill-prepared for teaching practice as they lacked both content knowledge of the new subjects of the curriculum, namely, Visual and Performing Arts

(VPA), Family Religion and Moral Education (FAREME) and Heritage Social Studies (HSS) and pedagogical content knowledge. Thematic findings of this research showed that lack of content knowledge and pedagogical content knowledge hindered resilience of student teachers on teaching practice in the COVID-19 era. Teachers' colleges should embrace the new curriculum and teach student teachers content for the new learning areas introduced in the primary school curriculum. The government should encourage cooperation between the Ministry of Primary and Secondary Education and the Ministry of Higher and Tertiary Education, Innovation, Science and Technology.

- The study recommended that teacher education should thoroughly equip student teachers with skills and knowledge of how to use online learning platforms such as Google Class and Zoom for teaching and learning. This recommendation emanated from the thematic findings of this study which established that when face-to-face teaching was transferred to e-learning due COVID-19 student teachers could not continue with teaching practice due to a lack of technological pedagogical content knowledge. Lack of technological pedagogical content knowledge and disruption of teaching practice due COVID-19 caused a lot of stress and anxiety in student teachers which hindered their resilience on teaching practice in the COVID-19 era. Lack of funds, ICT infrastructure and ICT specialists in teachers' colleges pose a great challenge. Teachers' colleges should set up state of the art ICT infrastructure and employ ICT specialists. An ICT levy and funding from the government should be put in place to raise funds for the development of ICT infrastructure in colleges.

### **5.10 Concluding remarks**

The major aim of this study was to explore the resilience of student teachers on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe. Qualitative data generation methods, namely focus group discussions and semi-structured interviews were used to explore the resilience of student teachers on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe.

Pertaining to the major COVID-19 induced teaching practice stressors, the thematic findings revealed that student teachers on teaching practice were subjected to teaching practice stressors induced by COVID-19 pandemic such as fear of contracting the COVID-19 virus, illness,

isolation, stigmatization and death, anxiety, uncertainty, hopelessness, economic hardships, prolonged teaching practice period, school closures, transference of face-to-face teaching to online learning. Pertaining to the factors that hindered the resilience of student teachers on teaching practice in the COVID-19 era, it emerged from this study that lack of teaching competencies, poor relationships, behaviour problems, class and classroom management, work overload and teaching practice supervision hinder the resilience of student teachers on teaching practice in COVID-19 era. It can be concluded from the findings of this study that student teachers on teaching practice in the COVID-19 era faced a host of COVID-19 induced teaching practice stressors which hindered their resilience.

Regarding personal and contextual resources that contribute to resilience outcomes in student teachers on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe, findings of this research study indicated that personal and contextual resources promote resilience in student teachers on teaching practice in COVID-19 era. Findings of the study further established that contextual support from stakeholders cultivates the resilience of student teachers on teaching practice during COVID-19 pandemic. It can be concluded from the findings of this study that capacity for resilience can be developed during initial teacher preparation, so the study recommends that the teacher education curriculum should include a subject on resilience. Thus, a pre-service teacher resilience conceptual model, ARRSSO is proposed as a guideline for stakeholders involved in pre-service teacher education so that they can develop the capacity for resilience in student teachers before to teaching practice.

This study, therefore, is of much relevance and of paramount importance because it is the first of its kind in Zimbabwe to shed important light on exploring the student teachers' resilience on teaching practice in the COVID-19 era in Masvingo District, Zimbabwe.

The major recommendation for this study calls for the Ministry of Higher and Tertiary Education, Innovation Science and Technology Development to take drastic steps towards the introduction of a compulsory module or a subject on resilience in all teachers' colleges and universities offering a diploma or a degree certificate in education.

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**APPENDIX A: Ethical Clearance letter from the University of the Free State**



**GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)**

21-Jun-2022

Dear Mr Marvelous Marenzenya

**Application Approved**

Research Project Title: **Exploring student teachers' resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe.**

Ethical Clearance number: **UFS-HSD2022/0020/22**

We are pleased to inform you that your application for ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted to the ethics office to ensure ethical transparency. Furthermore, you are requested to submit the final report of your study/research project to the ethics office. Should you require more time to complete this research, please apply for an extension. Thank you for submitting your proposal for ethical clearance; we wish you the best of luck and success with your research.

Yours sincerely

**Dr Adri Du Plessis**

**Chairperson: General/Human Research Ethics Committee**

**Dr Adri  
du  
Plessis** Digitally signed  
by Dr Adri du  
Plessis  
Date: 2022.06.21  
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205 Nelson Mandela  
Drive  
Park West  
Bloemfontein 9301  
South Africa

P.O. Box 339  
Bloemfontein 9300  
Tel: +27 (0)51 401  
9337  
[duplessis.A@ufs.ac.za](mailto:duplessis.A@ufs.ac.za)  
[www.ufs.ac.za](http://www.ufs.ac.za)



**Appendix B: Letter of approval from the Ministry of Primary and Secondary Education.**

All communications should be addressed to The Secretary for Primary and Secondary Education  
Telephone: 794595/796211  
Telegraphic address: "EDUCATION"  
Fax: 794505



ZIMBABWE

Reference: C/426/3  
Ministry of Primary and Secondary Education  
P.O Box CY 121  
Causeway  
HARARE

7 December 2021

Marvellous Marenyenya  
Morgenster Teachers Coolge  
P. O. Morgenster  
Morgenster  
Zimbabwe

**Re: PERMISSION TO CARRY OUT RESEARCH IN MASVINGO PROVINCE:  
MASVINGO DISTRICT: MORGENSTER CENTRAL; NEMAMWA AND  
NEMAZUVA PRIMARY SCHOOLS**

Reference is made to your application to carry out a research in the above mentioned schools on the research title:

**"EXPLORING STUDENT TEACHERS' RESILIENCE ON TEACHING PRACTICE IN  
COVID-19 ERA IN MASVINGO, ZIMBABWE"**

Permission is hereby granted. However, you are required to liaise with the Provincial Education Director Masvingo Province, who are responsible for the schools which you want to involve in your research. You should ensure that your research work does not disrupt the normal operations of the school. Where students are involved, parental consent is required.

You are also required to provide a copy of your final report to the Secretary for Primary and Secondary Education.

A handwritten signature in black ink, appearing to read 'Thabela'.

Thabela (Mrs)

SECRETARY FOR PRIMARY AND SECONDARY EDUCATION


PERMANENT SECRETARY  
MINISTRY OF PRIMARY AND  
SECONDARY EDUCATION

23 DEC 2021

P.O. BOX CY 121, CAUSEWAY  
HARARE, ZIMBABWE

**APPENDIX C: Letter of Approval from the Provincial Education Director (Masvingo Province)**

ALL communications should be addressed to  
"The Provincial Education Director for Primary and  
Secondary Education"  
Telephone: 263585/264331  
Fax: 039-263261

  
ZIMBABWE

Ref: C/440/1

Ministry of Primary and Secondary  
Education  
P.O Box 89  
Masvingo

06 December 2021

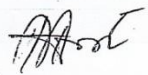
The Secretary  
Ministry of Primary and Secondary Education

**Attention:** Director Policy Planning Research and Statistics

**RE: SEEKING PERMISSION TO CARRY OUT AN EDUCATIONAL  
RESEARCH AT MORGENSTER CENTRAL PRIMARY, NEMANWA PRIMARY  
AND NEMAZUWA: MASVINGO DISTRICT.**  
The above matter refers.

Marenyenya Marvelous, a student at Free State University, is seeking permission  
to carry out research at the above mentioned schools in Masvingo District on,  
**"EXPLORING STUDENT TEACHERS RESILIENCE ON TEACHING  
PRACTICE IN COVID-19 ERA IN MASVINGO DISTRICT"**

Attached please find the applicant's letter, research instruments and a copy of  
the student's I.D. The application is supported since it meets the minimum  
requirements. Your authority to grant permission is therefore sought.

  
S. Mhike  
Acting Provincial Education Director  
**MASVINGO PROVINCE**

MINISTRY OF PR. & SEC. EDUCATION  
PROVINCIAL EDUCATION DIRECTOR  
MASVINGO PROVINCIAL OFFICE  
06 DEC 2021  
P.O. BOX 89, MASVINGO  
ZIM. TEL: 0392-264331  
FAX: 039-263261

**Appendix: D: Letter of Approval from the Provincial Education Director (Masvingo District)**

ALL communications should be addressed to  
"The Provincial Education Director for Primary and  
Secondary Education"  
Telephone: 263585/264331  
Fax: 039-263261



ZIMBABWE

Ref: C/440/1

Ministry of Primary and Secondary  
Education  
P.O Box 89  
Masvingo

06 December 2021

The Secretary  
Ministry of Primary and Secondary Education

**Attention:** Director Policy Planning Research and Statistics

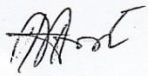

**RE: SEEKING PERMISSION TO CARRY OUT AN EDUCATIONAL  
RESEARCH AT MORGENSTER CENTRAL PRIMARY, NEMANWA PRIMARY  
AND NEMAZUWA: MASVINGO DISTRICT.**

The above matter refers.

Marenyenya Marvelous, a student at Free State University, is seeking permission to carry out research at the above mentioned schools in Masvingo District on,

**"EXPLORING STUDENT TEACHERS RESILIENCE ON TEACHING  
PRACTICE IN COVID-19 ERA IN MASVINGO DISTRICT"**


Attached please find the applicant's letter, research instruments and a copy of the student's I.D. The application is supported since it meets the minimum requirements. Your authority to grant permission is therefore sought.

  
 S. Mhike  
Acting Provincial Education Director  
**MASVINGO PROVINCE**

MIN. OF PRY. & SEC. EDUCATION  
PROVINCIAL EDUCATION DIRECTOR  
MASVINGO PROVINCIAL OFFICE

06 DEC 2021

P.O. BOX 89, MASVINGO  
ZIM. TEL: 0392-264331  
FAX: 039-263261

MIN OF PRIMARY & SECONDARY EDUCATION  
DISTRICT SCHOOLS INSPECTOR  
MASVINGO DISTRICT  
27 JUN 2022  
P.O. BOX 89, MASVINGO  
TEL: 0392-264343  


**APPENDIX E: Invitation letter for student teachers’ mentors**

Morgenster Teachers College

P.O. Morgenster

Masvingo

28 June 2022

The Mentor

..... Primary School

Masvingo

Dear sir/madam

**RE: Invitation to participate in a research study**

I do hereby invite you to participate in a face-to-face semi-structured interview on exploring student teachers’ resilience on teaching practice in COVID-19 era. My name is Marvelous Marenzenya and presently am studying for a PhD degree with the University of the Free State. I am required to conduct research as part of my studies. The title of my thesis is:

**Exploring student teachers’ resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe.**

The purpose of my study is to explore student teachers’ resilience on teaching practice in COVID-19 era. The study will be carried out in Masvingo District only.

The face-to-face semi-structured interviews will be focusing on challenges induced by COVID-19 pandemic to student teachers on teaching practice, the factors that hinder the resilience of student teachers on teaching practice, personal and contextual factors that develop resilience of student teachers on teaching practice and the support student teachers on teaching practice receive while on teaching practice to develop their resilience in COVID-19 era. Each interview session is expected to take 1hour to 1.5 hours. I will tape record the interview.

You have been purposively sampled on the basis of your vast experience in mentoring student teachers in the COVID-19 era. Research ethics will be adhered to. Accordingly, informed

consent, privacy, anonymity, confidentiality, debriefing, non-maleficence and beneficence will be maintained throughout the research study. No names of persons or schools shall be specified in the reports of the research. All participants will voluntarily participate, sign consent forms and will be free to withdraw at any time should they so wish.

Findings of the study are purely meant for educational purposes.

If you need any further information or have any suggestions, please do not hesitate to contact me or my supervisor Dr Kananga Robert Mukuna on [MukunaKR@ufs.ac.za](mailto:MukunaKR@ufs.ac.za), cell number +27 810 451 473.

Thank you

Yours faithfully

Marvelous Marenzenya

Cell: +263 773 443 925 or +263 788 543 687

Email: [maremarve@gmail.com](mailto:maremarve@gmail.com).

If you agree to participate in the research study, please sign in the space provided below.

Participant's Signature ..... Date .....

Researcher's Signature ..... Date .....

**APPENDIX F: Invitation letter for student teachers**

Morgenster Teachers College

P. O. Morgenster

Masvingo

28 June 2022

The Student Teacher

..... Primary School

Masvingo

Dear sir/madam

RE: Invitation to participate in a research study

I do hereby invite you to participate in a face-to-face semi-structured interview and focus group discussion on exploring student teachers’ resilience on teaching practice in COVID-19 era. My name is Marvelous Marenzenya and presently am studying for a PhD degree with the University of the Free State. I am required to conduct research as part of my studies. The title of my thesis is:

**Exploring student teachers’ resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe.**

The purpose of my study is to explore student teachers’ resilience on teaching practice in COVID-19 era. The study will be carried out in Masvingo District only.

The face-to-face semi-structured interviews and focus group discussion will be focusing on challenges induced by COVID-19 pandemic to student teachers on teaching practice, the factors that hinder the resilience of student teachers on teaching practice, personal and contextual factors that develop resilience of student teachers on teaching practice and the support student teachers on teaching practice receive while on teaching practice to develop their resilience in COVID-19

era. Each interview session is expected to take 1hour to 1.5 hours and focus group discussions will take 2 to 2.5 hours. I will tape record the interview and focus group discussion.

You have been purposively sampled on the basis of your vast experience in being on teaching practice in the COVID-19 era. Research ethics will be adhered to. Accordingly, informed consent, privacy, anonymity, confidentiality, debriefing, non-maleficence and beneficence will be maintained throughout the research study. No names of persons or schools shall be specified in the reports of the research. All participants will voluntarily participate, sign consent forms and will be free to withdraw at any time should they so wish.

Findings of the study are purely meant for educational purposes.

If you need any further information or have any suggestions, please do not hesitate to contact me or my supervisor Dr Kananga Robert Mukuna on [MukunaKR@ufs.ac.za](mailto:MukunaKR@ufs.ac.za), cell number +27 810 451 473.

Thank you

Yours faithfully

Marvelous Marennya

Cell: +263 773 443 925 or +263 788 543 687

Email: maremarve@gmail.com.

If you agree to participate in the research study, please sign in the space provided below.

Participant's Signature ..... Date .....

Researcher's Signature ..... Date .....

**APPENDIX G: Consent form**



**UNIVERSITY OF THE FREE STATE**

**Informed Consent Form**

The title of the research is:

**Exploring student teachers’ resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe.**

Supervisor: Dr Kananga Robert Mukuna

Student: Marvelous Marenzenya

Contact particulars: Cell: +263 773 443 925 or +263 788 543 687

Email: [maremarve@gmail.com](mailto:maremarve@gmail.com).

**Declaration by the participant**

I, the participant and undersigned.....

ID No.....

Residential Address

.....

Postal Address

.....

do hereby confirm that I got invited by Marvelous Marenzenya, a PhD student at the University of the Free State to participate in a research study on **“Exploring student teachers’ resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe”**

I understand that my participation is voluntary and I am free to withdraw at any stage without disclosing my reasons. My participation or withdrawal will not have any present or future effects on my work or studies. My participation has no financial costs or benefits to be accrued to me.

My identity will remain confidential in the proceedings of the interviews or focus group discussion. I am free to raise questions and views without any intimidation during the interview or focus group discussion. My humanity will be respected throughout my participation. I understand that recordings and transcripts will be made during the interview and focus group discussion. The researcher explained to me all the information concerning the study in the language best understood to me and no pressure was exerted on me by the researcher to participate.

I do hereby voluntarily consent to participate in the interview or focus group discussion of this research.

Signed at ..... on the ..... of ..... 2022.

Signature of participant .....

**Declaration by the researcher**

I, Marvelous Marennya declare that I explained the information above to the participant in the language best understood to him or her. He or she was given enough time to ask questions and freely decided whether or not to participate.

Signature .....Date.....

## **APPENDIX H: Interview Protocol for student teachers' mentors**

### **SEMI-STRUCTURED INTERVIEW PROTOCOL**

#### **Student Teachers' Mentors**

My name is Marvelous Marenzenya and currently am studying for a PhD degree with the University of the Free State. I am required to conduct research as part of my studies. Feel free to air out your ideas. Findings of the study are purely meant for educational purposes.

The title of my research project reads:

**Exploring student teachers' resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe.**

#### **Teaching Practice challenges induced by COVID-19.**

1. Participant Background Information
  - a) How old are you?
  - b) Gender
  - c) What is your highest qualification?
  - d) For how long have you been a mentor?
2. How do you feel about mentoring student teachers on teaching practice in the COVID-19 era?
  - a) Can you state any four dangers you are exposed to due to mentoring student teachers in the COVID-19 era.
  - b) How do you protect the learners, student teachers and yourself against COVID-19?
  - c) Does the school administration provide you with Personal Protective Equipment?
3. How did the outbreak of the COVID-19 pandemic influence the teaching methodologies student teachers use?
  - a) Which teaching methods are not suitable to use due to COVID-19 pandemic? Why?
  - b) Which teaching methods are suitable to use in the COVID-19 era? How effective are the methods?
4. During school closures face to face teaching was transferred to e-learning.
  - a) What are the advantages of using e-learning?

- b) Were the student teachers trained to use e-learning while in college?
  - c) What challenges did student teachers encounter over the use of e-learning? Can you state five challenges?
  - d) Suggest solutions to the use of e-learning.
  - e) How did the use of e-learning during school closures affect teaching practice progression?
5. How was teaching practice affected by school closures and the lockdown?
  6. Was your school prepared for re-opening after the lockdown? How did it affect student teachers psychologically, socially and financially?

### **Factors hindering resilience in student teachers on teaching practice**

7. As a mentor how do you feel about student teachers' teaching competences?
  - a) How confident are student teachers?
  - b) What stresses the student teachers?
8. Are there any persistent and negative pressures the student teachers are working under due to:
  - a) Poor relationships with the school administration
  - b) Poor relationships with the mentors
  - c) Poor relationships with fellow student teachers
  - d) Poor relationships with college lecturers
9. How do the following factors negatively affect student teachers' resilience
  - a) Deteriorating learner behaviour.
  - b) Deteriorating learner attitude towards schooling
  - c) Learner absenteeism
  - d) Splitting of classes to enhance social distancing
  - e) Classroom set up to enhance social distancing
10. How did the outbreak of COVID-19 negatively affect
  - a) Record keeping by student teachers
  - b) Time management by student teachers
  - c) Workload of the student teachers

11. Explain how workload and time management affect the student teachers' psychological wellbeing, their health, teaching competences and social life.
12. How did the outbreak of COVID-19 negatively affect teaching practice supervision by
  - a) College supervisors.
  - b) School based supervisors.
  - c) How does teaching practice supervision in the COVID-19 era stress the student teachers?
  - d) Suggest any other alternative ways of teaching practice supervision besides face-to-face supervision.

**Personal and contextual factors that promote resilience in student teachers.**

13. Describe the student teachers' emotional state and attitude on teaching practice in COVID-19 era.
14. State four strategies student teachers use to promote positive emotions.
15. Why are student teachers motivated to continue with teaching practice in COVID-19 era?
  - a) How does intrinsic motivation help student teachers to continue with teaching practice?
  - b) How does extrinsic motivation help student teachers to continue with teaching practice?
16. How does self-efficacy help student teachers remain determined to teach learners in COVID-19 era?
17. How does pedagogical and content knowledge develop student teachers' resilience on teaching practice in COVID-19 era?
18. What coping strategies develop student teachers' resilience on teaching practice in the COVID-19 era?
19. Describe how the following contextual protective factors promote student teachers' resilience on teaching practice in COVID-19 era?
  - a) Student teacher- school administration relationships
  - b) Student teacher- mentor relationships
  - c) Student teacher- student teacher relationships
  - d) Student teacher- college lecturer relationships

- e) Student teacher- learner relationships
  - f) Student teacher- community relationships
20. How does social competence help promote student teachers' resilience on teaching practice in COVID-19 era?
21. What resilience strategies do student teachers on teaching practice use in COVID-19 era?

**Support received by student teachers on teaching practice in COVID-19 era.**

22. What kind of support do student teachers receive from the following stakeholders which promote their resilience on teaching practice in COVID-19 era?
- a) The school administration
  - b) Qualified teachers at the school
  - c) Students' mentors
  - d) Fellow student teachers
  - e) College lecturers
  - f) The community
  - g) The family
  - h) Friends
  - i) Social media networks
  - j) Donor community
23. What kind of support do student teachers on teaching practice in COVID-19 era need to sustain their resilience?
24. What can be done by teachers' colleges to develop resilience in student teachers which they can use on teaching practice as an asset that will assist them overcome challenges encountered during COVID-19 era

## **APPENDIX I: Interview Protocol for student teachers**

### **SEMI-STRUCTURED INTERVIEW PROTOCOL**

#### **Student Teachers**

My name is Marvelous Marenzenya and currently am studying for a PhD degree with the University of the Free State. I am required to conduct research as part of my studies. Feel free to air out your ideas. Findings of the study are purely meant for educational purposes.

The title of my research project reads:

**Exploring student teachers' resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe.**

#### **Challenges induced by COVID-19 pandemic.**

1. Participant Background Information
  - a) How old are you?
  - b) Gender
  - c) What is your highest qualification?
  - d) For how long have you been on teaching practice?
2. How do you feel about being on teaching practice in the COVID-19 era?
  - a) Can you state any four dangers you are exposed to due to teaching learners in the COVID-19 era.
  - b) How do you protect the learners and yourself against COVID-19?
  - c) Does the school administration provide you with Personal Protective Equipment? Give examples.
3. How did the outbreak of the COVID-19 pandemic influence the teaching methodologies you have to use?
  - a) Which teaching methods are not suitable to use due to COVID-19 pandemic? Why?
  - b) Which teaching methods are suitable to use in the COVID-19 era? How effective are the methods?

4. During school closures face to face teaching was transferred to e-learning.
  - a) What are the advantages of using e-learning?
  - b) Were you trained to use e-learning while in college?
  - c) What challenges did you encounter over the use of e-learning? Can you state five challenges?
  - d) Suggest solutions to the use of e-learning.
  - e) How did the use of e-learning affect your teaching practice progression?
5. How was your teaching practice affected by school closers and the lockdown?
6. Was your school prepared for re-opening after the lockdown? How did it affect you financially and psychologically?

#### **Factors hindering resilience in student teachers on teaching practice**

7. As a student teacher how do you feel about your teaching competences?
  - a) How confident are you?
  - b) What stresses you?
8. Are there any persistent and negative pressures you are working under due to:
  - a) Poor relationships with the school administration
  - b) Poor relationships with the mentor
  - c) Poor relationships with fellow student teachers
  - d) Poor relationship with your college lecturers
9. How do the following factors negatively affect your resilience
  - a) Deteriorating learner behaviour.
  - b) Deteriorating learner attitude towards schooling
  - c) Learner absenteeism
  - d) Splitting of classes to enhance social distancing
  - e) Classroom set up to enhance social distancing
10. How did the outbreak of COVID-19 negatively affect
  - a) Record keeping
  - b) Time management
  - c) Workload

11. Explain how workload and time management affect your psychological wellbeing, your health, teaching competences and social life.
12. How did the outbreak of COVID-19 negatively affect teaching practice supervision by
  - a) College supervisors.
  - c) School based supervisors.
  - d) How does teaching practice supervision in the COVID-19 era stress you?
  - e) Suggest any other alternative ways of teaching practice supervision besides face-to-face supervision.

**Personal and contextual factors that promote resilience in student teachers.**

13. Describe your emotional state and attitude on teaching practice in COVID-19 era.
14. State five strategies you use to promote positive emotions.
15. Why are you motivated to continue with teaching practice in COVID-19 era?
  - c) How does intrinsic motivation help you to continue with teaching practice?
  - d) How does extrinsic motivation help you to continue with teaching practice?
16. How does self-efficacy help you remain determined to teach learners during COVID-19 era?
17. How does pedagogical and content knowledge develop your resilience on teaching practice in COVID-19 era?
18. What coping strategies develop your resilience on teaching practice in the COVID-19 era?
19. Describe how the following contextual protective factors promote your resilience on teaching practice in COVID-19 era?
  - a) Student teacher- school administration relationships
  - b) Student teacher- mentor relationships
  - c) Student teacher- student teacher relationships
  - d) Student teacher- college lecturer relationships
  - e) Student teacher- learner relationships
  - f) Student teacher- community relationships
20. How does social competence help you develop resilience on teaching practice in COVID-19 era?

21. What resilience strategies do you use to promote your resilience on teaching practice in COVID-19 era?

**Support received by student teachers on teaching practice in COVID-19 era.**

22. What kind of support did you receive from the following stakeholders which promote your resilience on teaching practice in COVID-19 era

- a) The school administration
- b) Qualified teachers at the school
- c) Students' mentors
- d) Fellow student teachers
- e) College lecturers
- f) The community
- g) The family
- h) Friends
- i) Social media networks
- j) Donor community

23. What kind of support do you expect on teaching practice in COVID-19 era to sustain your resilience?

24. What can be done by teachers' colleges to develop resilience in student teachers which they can use on teaching practice as an asset that will assist them overcome challenges encountered during COVID-19 era?

## **APPENDIX J: Focus Group Discussion Protocol for student teachers**

### **FOCUS GROUP DISCUSSION PROTOCOL**

#### **Student Teachers**

My name is Marvelous Marenzenya and currently am studying for a PhD degree with the University of the Free State. I am required to conduct research as part of my studies. Feel free to air out your ideas. Findings of the study are purely meant for educational purposes.

The title of my research project reads:

**Exploring student teachers' resilience on teaching practice in COVID-19 era in Masvingo District, Zimbabwe.**

1. Background information
  - May you tell me how long you have been on teaching practice in the COVID-19 era?
2. Let us discuss the dangers you are exposed to on teaching practice due to the outbreak of COVID-19 pandemic.
  - What are the effects of the dangers on your psychological wellbeing, health and teaching competences?
  - Does the school provide you with adequate personal protective equipment?
  - Describe how you protect the learners and yourself against COVID-19
3. Let us talk about teaching methods, their advantages and challenges.
  - Name the teaching methods which spread COVID-19 pandemic and explain how they spread the pandemic.
  - Identify teaching methods which do not spread COVID-19 pandemic and explain how they prevent the spread of the virus.
  - Describe the advantages and disadvantages of using e-learning during school closures due to the COVID-19 pandemic?
4. How did school closures negatively affect your teaching practice?

5. Were schools adequately prepared for re-opening after the COVID-19 induced closures? Explain the challenges which you experienced and their effects on your teaching practice.
6. Let us discuss the effects of positive and negative relationships with various stakeholders while on teaching practice in COVID-19 era.
  - Explain how negative relationships hinder the development of student teachers' resilience on teaching practice in COVID-19 era.
  - Explain how positive relationships promote the development of student teachers' resilience on teaching practice in COVID-19 era.
  - Student teacher- school administration relationships
  - Student teacher- mentor relationships
  - Student teacher- student teacher relationships
  - Student teacher- college lecturer relationships
  - Student teacher- learner relationships
  - Student teacher- community relationships
7. Let us discuss teaching practice supervision by college lectures and school supervisors.
  - Why did you find teaching practice supervision stressful in COVID-19 era?
  - What effect did the stress have on your psychological wellbeing, health and teaching competences?
  - What can be done to reduce stress caused by teaching practice supervision in COVID-19 era?
8. Let us talk about motivation and emotions as personal protective factors that promote your resilience on teaching practice in COVID-19 era.
  - What sustains your motivation to continue with teaching practice in COVID-19 era?
  - Explain the strategies you use to promote positive emotions on teaching practice in COVID-19 era.
9. Explain how your teaching competences promote your resilience on teaching practice in COVID-19 era.
10. Let us discuss the coping strategies that you use to promote your resilience on teaching practice in COVID-19 era.

11. Describe the support you received from various stakeholders which promoted your resilience on teaching practice in COVID-19 era.

- The school administration
- Qualified teachers at the school
- Students' mentors
- Fellow student teachers
- College lecturers
- The community
- The family
- Friends
- Social media networks
- Donor community

12. What can be done by teachers' colleges to develop resilience in student teachers which they can use on teaching practice as an asset that will assist them overcome challenges encountered during COVID-19 era?

## APPENDIX K: Language and Editing Certificate



6 February 2024

### To Whom It May Concern

This document certifies that the thesis titled **EXPLORING STUDENT TEACHERS' RESILIENCE ON TEACHING PRACTICE IN THE COVID-19 ERA IN MASVINGO DISTRICT, ZIMBABWE** by **MARENYENYA MARVELOUS** was edited and proofread by a professional English language editor, Dr V. Jenjekwa for correct grammar, punctuation, readability, coherence and cohesion. At all stages, the candidate had the liberty to reject or accept the editor's revisions and suggestions for revision.

Thank you.

Dr V. Jenjekwa

*[(D. Lit et Phil (Linguistics) (UNISA); M.ED (English) (GZU); PGDE (English) (UZ); BA (English and Linguistics) (UZ)].*