STUDENT NURSES' PERCEPTIONS ON THE USE OF SELF-DIRECTED LEARNING APPROACHES IN SELECTED ESWATINI NURSING SCHOOLS

BY

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DECLARATION

I declare that the above dissertation is my own work and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.



15 April 2025

Signature **DATE**

DEDICATION

This project is dedicated to the glory of God and also to my husband, Cosmas Maphosa and children, Ropafadzo, Panashe and Kuzivakwashe.

ACKNOWLEDGEMENTS

I give glory and honour to God for the strength, favour and grace.

I am grateful to my supervisor, Prof. Faniswa Mfidi, who supervised my research work, offered useful and constructive criticism, and provided valuable materials which contributed to the success of the project.

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I give special thanks to the Deans of the two university nursing schools used for the field work of this research. My appreciation also goes to all the nursing students who participated in the study for their valuable contributions.

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ABSTRACT

Background: Worldwide reforms in healthcare sectors, coupled with changing disease patterns and patients' knowledge of their rights, call for a change in the education needs of those who provide care.

Purpose: The study aimed to examine student nurses' perceptions of self-directed learning (SDL) approaches within selected nursing schools in Eswatini.

Method: Constructivism is the paradigm that supported the study. The study followed a qualitative approachThe research was conducted in two university-affiliated nursing schools: one managed by a church and the other by the government. The study population included final-year nursing students enrolled in a four-year degree programme at the selected institutions. A purposive sampling technique was used, resulting in a sample of 20 nursing students aged between 21 to 35 years, consisting of 12 females and 8 males. Data collection involved semi-structured individual interviews from which qualitative data were gathered until data saturation was reached. Thematic content analysis was employed to identify themes and subthemes.

Study findings: Three key themes emerged: leading in one's own learning, teaching approaches that enhance SDL, and barriers to SDL. Six subthemes further supported these three themes. Participants described SDL as taking initiative in their learning, emphasising its role in broadening their learning scope, fostering a therapeutic learning environment, enhancing presentation skills, promoting independence and critical thinking,

and improving knowledge retention. Group work was a frequently utilised method to facilitate SDL, with students collaborating on group presentations, which they found helpful for peer learning. However, participants expressed the need for more opportunities for individual research and leadership development within SDL. The study also identified barriers to SDL that included limited resources, inadequate internet access, and insufficient engagement with study materials outside the classroom. While SDL promoted deeper learning and autonomy, participants highlighted the need for adequate resources, time, and guidance to fully implement SDL effectively.

Conclusion: The findings provide valuable insights into nursing students' perceptions of SDL, its benefits, and its challenges in teaching and learning. These insights can inform nurse educators' revision and redesigning of teaching approaches to better align with students' needs and interests. The study also offers a foundation for future research to explore dimensions such as student and educator characteristics that inform curriculum development in nursing education

Keywords: Learning, learning approaches, self-directed learning, perceptions, student nurse, teaching.

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CHAPTER ONE

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Self-Directed Learning (SDL) is often linked with other approaches to learning, such as independent learning, personalisation, student-centred learning, ownership of learning, self-paced learning, or self-regulated learning (Alharbi 2018:231). Competent health workers should have the knowledge, attitudes, and skills to deliver quality care. This calls for a substantial shift of teaching and learning in nursing education from the traditional tutor-centred approaches to learner-centred, research-based and problem-solving approaches (Grealish & Shaw 2018; Tekkol & Demirel 2018:2). Tekkol and Demirel (2018:2) state that in self-directed learning, the student nurse shows an ability to search for new information, and to critically evaluate and adopt the information retrieved through the clinical decision-making process. According to Kidane, Roebertsen, and van der Vleuten (2020:2), nurse education should prepare nurses for today's complex healthcare environment by using appropriate approaches to ensure that nurses are critical thinkers and problem-solversin different clinical environments. Self-directed learning is centred on important issues such as student-teacher roles and relationships and the role of information and communication technology in learning.

1.2 BACKGROUND OF THE RESEARCH PROBLEM

Self-directed learning helps students effectively acquire knowledge and skills needed for their professional careers. It is, therefore, important to study how student nurses understand self-directed learning and learn in self-direct ways Bosch, Mentz and Goede (2019:11). Second, through self-directed learning, students can solve problems, develop strategies, review scenarios, generate hypotheses, and confirm the resources needed (Kidane et al. 2020:2).

The issue of changes in nurse education pedagogical practices is a global phenomenon.

Premkumar, Vinod, Sathishkumar, Pulimmod, Umaefulam. Samuel and John (2018:1) define self-directed learning as “one’s own initiative, with the learner having primary responsibility for planning, implementing and evaluating the effort”. It is a teaching pedagogy that has been around since the 1960s and can be used in classrooms and experimental settings (Robinson & Persky 2020:1). Self-directed learning dates to the 1800s when it was done in the form of biographies and autobiographies, as many prominent figures in the society were self-taught (Mentz, de Beer & Bailey 2019:3 citing Ketty 1994).

According to Knowles (1975), as quoted by Mentz et al. (2019:4), self-directed learning is divided into three sections: the student, the educator, and the learning resources. There are many skills students need to acquire to be self-directed learners, such as cognitive skills, metacognitive skills, and affective skills. Educators must assist students to be self-directed learners by ensuring they are actively involved in learning. The learning resources needed include the physical environment, course materials and equipment.

Aagten (2016:4) argues that modern healthcare's work environment is continuously changing. For example, healthcare organisations must provide more insight into care processes because patients have different needs and wishes. Students should be prepared to adapt to these rapid developments through self-directed learning, which makes them flexible and capable of acquiring, developing, and sharing knowledge. In agreement with the same observation, Caravello, Jimenez, Brachio, and Morote (2015:24) observe that there is a pressing need for higher education institutions to emphasise learning rather than teaching and to focus on getting students to acquire knowledge by learning how to learn rather than being given instruction. Although many scholars have explored the competencies required for the success and effectiveness of self-directed learning, limited studies look at students' self-directed learning approaches. This study explored students' perceptions of self-directed learning approaches used during nurse training.

Worldwide reforms in healthcare sectors, coupled with changing disease patterns and patients' knowledge of their rights, call for a change in the education needs of those who

provide care. According to Chakravarthy, Ibrahim, Mahmud, and Venkatasalu (2018:60), the increased health complexities require nurses to upscale their knowledge by enhancing their professional competencies. Therefore, lifelong self-directed learning is essential to formally or informally develop their knowledge, skills, and attitudes.

In the European and American contexts, changes in socioeconomic status over the past ten years have necessitated changes to the education system, especially in higher education, which provides society with highly qualified specialists (Nakonechna 2017:96). Self-directed learning has been known to engender attributes such as autonomy, responsibility, complexity, voice, and choice in higher education institutions. As Premkumar, Vinod, Sathishkumar, Pulimood, Umaefulam, Samuel, and John (2018) assert, many higher education institutions push self-directed learning as a key idea to help prepare professionals to be lifelong learners.

In the Asian context, Alharbi (2018:232) cites Shaikh (2013), who claims that a self-directed learner seeks out new information, examines it critically, and uses the knowledge acquired to make clinical decisions. As a result, nurse educators should encourage self-directed learning attitudes and abilities during nursing training. According to Yang, Zhu, Jiang and Qu (2021:1), self-directed learning is a promising approach in China that may support lifelong learning since students can identify their own learning requirements.

In the African context, Kidane et al. (2020:5) state that self-directed learning provides enough accountability to choose the material to be studied, set aside time for it, and comprehend it thoroughly. This is important in today's world, where scientific knowledge constantly evolves. A study by Olivier and Wentworth (2021:17) in Southern Africa, particularly South Africa and Namibia, found that the relevance of self-directed learning is demonstrated by the changing educational setting and dynamic demands around learning at all academic levels. Students who engage in self-directed learning take responsibility for their education by defining objectives, choosing learning tactics, and assessing their progress. Pitikoe, Hongo and Mavimbela (2021:215-216) discovered at the University of Eswatini that self-directed learning boosted independent learning,

particularly for individuals with extra obligations contemporaneous with learning. It allows learners to multi-task because they can set their own goals and how much content they must cover weekly. It is, therefore, important to establish how self-directed learning engages nursing students in deeper learning as problem solvers and critical thinkers responsible for their learning. Hence, the rationale for this study.

1.3 RESEARCH PROBLEM

The study was motivated by the researcher's own professional experiences as a nurse practitioner who regularly works with freshly licensed nurses and student nurses who exhibit little effort and initiative in the workplace. This research study sought students' views on self-directed learning approaches used during nurse training. Although cognitive and affective skills like problem-solving, teamwork, communication, self-awareness, inventiveness, and professionalism can be employed, there is a dearth of research on objectively evaluating self-directed learning abilities (Robinson & Persky 2020:295).

Armstrong, Rispel, and Penn-Kekana (2015:9) note that student nurses lack skills, especially the ability to apply theoretical knowledge to patient care, which could pose challenges in training approaches. The declining interest in the profession by newly qualified nurses in Eswatini may be due to low self-esteem (Zikalala, Nkhwashu & Moloko 2021:3). There is a need to explore whether students experience self-directed learning in the curricula.

In higher education institutions, students are expected to be responsible for part of their learning. However, some institutions find that their students are not academically prepared for this experience, which is a serious concern since nursing educators must be equipped to handle these problems (Abou-Zaid 2015:2). A study by Kidane, Roebertsen and Van der Vleuten (2020) established that the curriculum is still not free from teacher-centred culture as most teachers still decide the learning process.

1.4 RESEARCH PURPOSE

In this study, the researcher sought to explore student nurses' perceptions of using self-directed learning approaches in selected Schools of Nursing in Eswatini.

1.4.1. Research Objectives

The following objectives guided the study.

a) To explore student nurses' viewpoints regarding the use of SDL during their training.

b) To describe learning approaches used to enhance self-directed learning in selected schools.

c) To determine barriers to using self-directed learning in selected nursing schools.

1.4.2 Research Questions

The researcher sought to answer the following questions:

a) What are the student nurses' viewpoints towards the use of self-directed learning?
b) What are the learning approaches used to enhance self-directed learning?
c) What are the barriers to student nurses' use of self-directed learning in selected nursing schools?

1.5 SIGNIFICANCE OF THE STUDY

This study is useful to many stakeholders in nursing education:

1.5.1 Nurse educators

The nurse educators shall:

i. have an enhanced understanding of SDL learning approaches.
ii. have the insight to reflect on current teaching approaches, ascertain their usefulness and map a way forward.
iii. Find ways of creating SDL environments and SDL assessments.

1.5.2 The Nursing Students

The nursing students will be assisted in adopting SDL approaches, making them responsible for their learning and competent health practitioners.

1.5.3 Educational Planners

The educational planners may find the study useful in ways that justify approaches to be used in nursing schools.

1.6. DEFINITION OF KEY TERMS

This section discusses the key terms guiding the study in a scholarly and operational manner.

Learning is a behaviour change caused by experience, brought about by developing new skills, knowledge, understanding, and values. It is a relatively permanent change, usually brought about intentionally (De Houwer, Barnes-Holmes & Moors 2017:631). In this study, learning is an active process of constructing and using meanings to interpret circumstances. Students acquire and determine what information they need to develop.

Learning approaches refer to applying cognitive or learning styles when engaging with learning situations and include an individual's typical or habitual mode of problem-solving, thinking, perceiving, and remembering. (Öhrstedt & Lindfors 2019:1421). This study refers to learning approaches nursing students use in self-directed learning.

Nursing includes autonomous and collaborative care of individuals of all ages, families, groups, and communities, sick or well, in all settings. It encompasses the promotion of health, the prevention of illness and the care of ill, disabled and dying people (WHO 2020:1). In this study, nursing means the use of clinical judgment in the provision of care to enable people to improve, maintain, or recover health, cope with health problems, and achieve the best possible quality of life.

Nursing institution means the Institute of Health Sciences education (Swaziland Nurses and Midwives Act 1965 as amended A.2/1989). In this study, the term refers to the nursing

College/ department at public and private universities, where student nurses receive education and training in general nursing at a diploma/ degree level and, upon completion, will be registered as professional nurses.

Perceptions: The Essential English Dictionary (2022) describes perception as insight or intuition, a way of seeing or comprehending a phenomenon. This study's perceptions entail student nurses' viewpoints on using self-directed learning approaches in their training.

Self-directed learning is the process in which individuals take the initiative, with or without the help of others, in finding their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning methods and evaluating learning outcomes (Mentez et al. 2018:2). In this study, self-directed learning means the ability of the student nurse to identify their learning needs and to identify resources that can lead them in attaining learning goals.

Student Nurse: According to the Swaziland Nurses and Midwives Act. 1965, "student nurse" means a person whose name appears in a Register of Student Nurses kept under section 6 (1) (c) or 13 (1)(d). In this study, student nurse means a person enrolled in a course of instruction at an approved school of nursing professional or practical nursing who is training to be a registered nurse.

Teaching is a process of helping others acquire knowledge, competencies, and values (Wati, Yanto & Kardoyo 2022:337). In this study, teaching means facilitating student nurses' learning using self-directed learning approaches.

1.7 FOUNDATION OF THE STUDY.

This section outlines how the study was conducted. It describes the research paradigm and the theoretical framework that guided the study.

1.7.1 The Research Paradigm

A research paradigm is a research philosophy encompassing a set of philosophical

assumptions to look at natural phenomena and guide one's approach to inquiry (Polit & Beck 2018:562). The constructivist paradigm underpinned the study. Constructivism is linked to the qualitative research method that assists participants to express their views and develop subjective meanings attached to the phenomena (Linake, Maphosa & Kunene 2022:92). Constructivism accepts reality as a construct of the human mind, assumes that all knowledge is constructed from the human experience. Based on cognitive psychology, Constructivism recognises that reality is a product of human intelligence interacting with experience in the real world (Adom, Yeboah & Ankrah 2016: 5).

The research study was located within the interpretive research paradigm. This paradigm is often combined with Constructivism, which believes that individuals seek an understanding of the world in which they live and work and develop subjective meanings of their experiences. The goal of the research is to rely as much as possible on the participant's views of the situation being studied (Creswell 2018:56). In this study, exploring the student nurses' perceptions of self-directed learning will entail interactions between the researcher and the participants aimed at eliciting the participants' viewpoints on the phenomenon from their own contextual opinions.

According to Barker et al. (2021:1049), social Constructivism focuses on how knowledge is created through social interaction, particularly in interpersonal relationships and learning in social environments. Mentz, de Beer, and Bailey (2019:94) cite Vygotsky (1978), who describes constructivist theory as knowledge achieved by the interaction that occurs place within oneself through introspective thought. According to Vygotsky's theory, Constructivism encourages an atmosphere in which students actively participate in their education. The educator becomes the facilitator to construct meaning for students, and both students and teachers share the learning experience. According to Cohen, Manion and Morrison (2018:23), students actively seek out, select, and construct their meaning, which makes them understand themselves and the world around them. Social Constructivism enables individuals to make sense of their social lives, and the process is rooted in sociocultural contexts and interactions; there is cognition and deliberate perception to understand oneself and the world (Mentez et al. 2018:235). The

interpretivist research paradigm, which contends that participants desire to comprehend the world in which they live, is consistent with this approach. It enables the researcher to see the world through the participants' eyes and then utilise their experiences to build and interpret the researcher's knowledge from the collected data (Pham 2018:3, citing Creswell, 2007). Strauss and Corbin (1990), as quoted by Kinvunja and Kuyini (2017:36), observe that interpretivism develops a theory from actual events that explains how social processes work and what they imply. It focuses on the participants' experiences under investigation and their actions, reactions, thought processes, and significance to them. In this study, social Constructivism, based on the work of Lev Vygotsky, was used. It is concerned with ways in which knowledge is constructed through social interaction.

1.7.2 Conceptual Framework

The study revolves around the concepts listed in Figure 1.1. The study examines self-directed learning in nursing education with a focus on self-directed learning characteristics: self-management or control, self-monitoring or responsibility, promoting or hindering factors, common SDL approaches and benefits, SDL concept in nurse education, as well as motivation and task performance, as indicated in Figure 1.1. As specified in Section 1.4, the study questions and views of the key role players in their understanding of self-directed learning in nurse education were solicited. The common approaches utilised to promote self-directed learning and the benefits derived by the students were also explored. The study further examined factors that promoted or hindered the implementation of self-directed learning in nurse education.

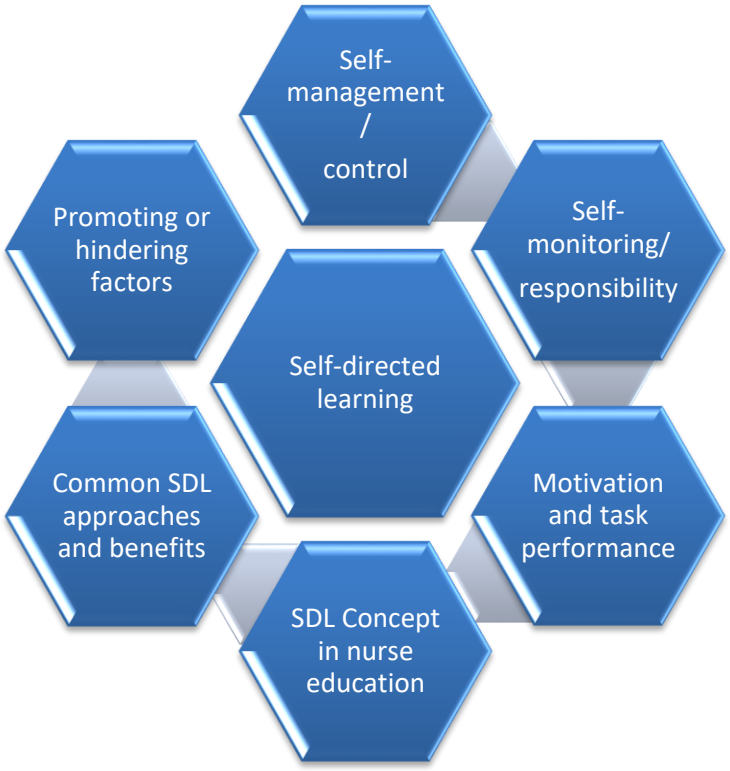


Figure 1.1: Conceptual Framework (Researcher's own)

1.8. RESEARCH APPROACH AND RESEARCH DESIGN

This section discusses the research approach and the research design used in this study.

1.8.1 The Research Approach

According to Creswell (2018:50), research approaches are research plans and procedures that provide detailed data collection methods, analysis, and interpretation and involve several decisions. The study followed a qualitative approach. Qualitative research is naturalistic. It focuses on people and unique and meaningful human interactions. It provides an in-depth and detailed understanding of meanings, actions, non-observable and observable phenomena, attitudes, intentions, and behaviours (Brink, Van der Walt & Van Rensburg 2018:104). This study examined perceptions of self-directed learning approaches in teaching and learning by exploring student nurses' views. The primary purpose was to explore, describe and explain student nurses' experiences. Qualitative research enabled the researcher to describe experiences from the perspective of student nurses. Qualitative research applies to my study because it

aims to explore and discover issues about the problem, in this case, learning approaches. It helped the researcher understand students and their educational settings.

1.8.2 The Research Design

Research design is a set of logical steps the researcher takes to answer the research question. It forms the blueprint of the study (Brink et al. 2018:92). This study utilised an exploratory, descriptive qualitative design. This design aims to explore and describe issues about the phenomenon under study: self-directed learning in nurse training. It enables the researcher to analyse the words of the participants to understand the phenomenon, with knowledge constructed from the participant's point of view (Burns & Grove 2017:66).

Brink et al. (2018:105) state that this design examines human experiences through a description provided by the people involved. In this study, the researcher described students' experiences regarding self-directed learning from their contextual standpoint.

1.9 SCOPE OF THE STUDY

In this section, the limitations and delimitations of the study are addressed, starting with the limitations.

The study focused on students in selected nursing schools in Eswatini. This was done for cost considerations but could limit the generalisability of findings for the whole of Eswatini. The study also focused on student nurses only, leaving other stakeholders such as nurse educators. Data from nurse educators could have given a more complete picture of the SDL approaches used.

Conceptually, the study focused on the use of self-directed learning approaches in nurse education from the point of view of trainee nurses. Geographically, the study was limited to only nursing schools in Eswatini.

1.10 Ethical Considerations

Research procedures' adherence to professional, legal, and societal obligations to study participants is the focus of ethics, a set of moral principles (Polit & Beck, 2018: 548). The ethical principles outlined in section 3.7 were employed to protect participants' privacy by preserving their identity and confidentiality, preventing harm, and ensuring their freedom of participation. These guidelines were essential to the study's ethical positioning.

1.11 STRUCTURE OF THE DISSERTATION

The study is divided into five chapters, as outlined below.

Chapter one: Orientation of the study

This chapter describes the research study in detail, including an introduction and the study's background. It also defines keywords, describes the problem statement, and presents the study's research questions, objectives, purpose, and delimitation.

Chapter Two: Literature Review

This chapter provides the study's theoretical foundation by outlining an appropriate framework for the investigation and analysing pertinent literature.

Chapter three: Research design and methodology

This chapter provides a detailed explanation of the research process, including the research paradigm, design, research approach, population and sample, data collection tools, and data trustworthiness in the study.

Chapter four: Presentation, Analysis, and Description of the study findings

The results are presented and analysed, and the findings are discussed in this chapter.

Chapter Five: Conclusions and Recommendations

This chapter summarises the study's findings and provides the study's conclusions and recommendations for future studies.

1.12 CONCLUSION

In chapter one, the researcher provided an orientation and overview of the study. The study was provided in context by presenting the entire background of the study. It discussed how self-directed learning generally came to be, leading to the specific Eswatini context in which the study was conducted. The problem was stated, and the background of the study was discussed. The researcher noted the study's main and supporting research questions, as well as the research objectives. The researcher explained the study methodology briefly. The researcher also briefly discussed the interpretivist research paradigm and qualitative research approach. The researcher also described the study's ethical considerations and measures taken to improve data trustworthiness. The researcher also explained the main ideas of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Examining the study's theoretical framework and a survey of pertinent literature constitute the focus of this second chapter. In this chapter, the researcher briefly explains the value of performing a literature review to "join the conversations" surrounding one's research and expand on prior work. A literature review is done on the various facets of self-directed learning. Self-directed learning's qualities and advantages are examined in relation to nursing education. The chapter also discusses the importance of a theoretical framework in research and discusses the social constructivist and transformative learning theories and how they inform the present study.

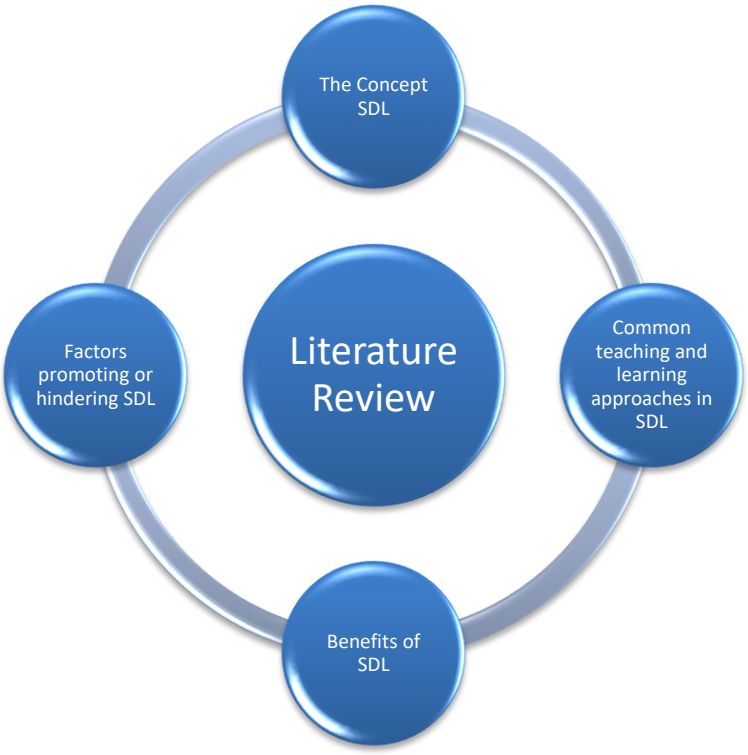


Figure 2.1 Framework for Literature Review (Researcher's Own).

The framework in Figure 2.1 illustrates how the literature review was conducted in this section. It begins by discussing self-directed learning, its characteristics and its

application in nurse education. Literature on the everyday teaching and learning approaches in self-directed learning was reviewed, followed by literature on the benefits of self-directed learning and, finally, on factors promoting and hindering self-directed learning, is discussed. The next section focuses on the review of literature on the concept of self-directed learning.

2.2 THE CONCEPT OF SELF-DIRECTED LEARNING

Self-directed learning is a concept that is used in numerous 21st-century learning strategies and is regarded as crucial to the individual learning experience (Avsec & Jagiełło-Kowalczyk 2021:11). Of importance in self-directed learning is the student's ability to manage learning and resources, show independence, and think critically and systematically when solving challenges (Kavousi, Miller & Alexander 2020:713). It is, therefore, important to embrace teaching and learning approaches that foster independent learning and promote life-long learning in students. The important elements of self-directed learning, such as collaboration, creativity, and problem-solving, are vital components of graduate attributes necessary for health professionals, hence the importance of inculcating them in the nurse training programs.

According to Knowles (1975), cited in Hutasuhut, Abu Bakar, Ghani, and Bilong (2023:221), self-directed learning (SDL) is a process in which students take the initiative to identify their learning requirements, define learning goals, find resources, select learning techniques, and assess their learning outcomes. The implications of the foregoing statement are far-reaching as they allude to independent learning and the empowerment of students to take responsibility for their learning. Students should not rely on passive approaches to learning where they wait for the lecturer to present knowledge but should actively search for knowledge (Leatemia, Susilo & van Berkel (2016:385).

Bosch, Mentz, and Goede (2019:1) state that self-directed learning is a process in which students are actively involved and take control of their learning. They emphasise that students should not be passive recipients of knowledge but should actively search for and share knowledge. Piva, Skela-Savi, Jovi, Avdi, and Kalender-Smajlovi (2021:1) also note the importance of actively involving nursing students in learning. They argue that active learning methods are essential for nursing education because they help students

develop communication and critical thinking skills, which are essential for safe patient care. The current study investigated how trainee nurses were actively involved in the learning process to identify elements of self-directed learning in nursing education.

Self-directed learning does not happen in isolation. It is a collaborative process that requires learners to develop the skills and attitudes necessary for teamwork (Bosch 2017:4). Costello, Russell, and Coventry (2021:1) emphasise the importance of teamwork in healthcare, stating that multidisciplinary healthcare teams provide care and rely on communication and effective teamwork to ensure safe patient care. Teamwork can improve patient care and satisfaction, reduce medical and nursing errors, increase workforce cohesiveness, reduce burnout among healthcare professionals, and boost productivity and patient safety. Given the importance of teamwork as an attribute of a professional nurse, the current study focused on implementing self-directed learning in the form of teamwork during nurse training.

Self-directed learning is a process of knowledge-building through discussion and dialogue. Students who engage in self-directed learning actively develop their knowledge by talking with others about the key aspects of the process (Bosch, Mentz, & Goede, 2019:4). Costello, Russell, and Coventry (2021:2) state that teamwork is a globally valued attribute essential for effective patient-centred healthcare delivery. Effective teamwork in nursing is critical to preventing misunderstandings and miscommunications about team roles and responsibilities. The current study aimed to determine how nursing students engaged in collaborative learning as part of self-directed learning.

2.2.1 Characteristics of self-directed learning

Self-directed learning has various characteristics, and this section discusses some of the most important ones. Through collaborative learning activities that include peer interactions and discussions in small groups, students can build the fundamental abilities of self-directed learning required for their tertiary-level success. According to Fong, Gonzales, Hill-Troglin Cox, and Shinn (2023:1), these interactions allow students to improve their learning capacity, ask questions, find helpful tools or resources, and make connections between their courses.

Self-directed learning includes cooperative learning as well. Because it promotes teamwork and includes critical thinking and practice, collaborative learning is a suitable model for higher education, especially in a nursing degree. Additionally, it enables communication and idea-sharing within and across groups of students. Additionally, it assists in developing their social, cooperative, cognitive, and constructive interpersonal abilities (Wongsasung, Satityudhakarn, Takan & Nutong 2018:41).

Self-directed learning is directly linked to decision-making in all types of situations. According to Nibbelink and Brewer (2018:917), decision-making is vital in the nursing profession as it is essential to minimise or completely eradicate errors in decision-making that may put patients at risk. Similarly, Tower, Watson, Bourke, Tyers & Tin (2019:3923) note that decision-making in clinical situations is an important aspect of a competent nurse and is linked to decision-making in situation awareness. It is, therefore, important to utilise teaching and learning approaches that inculcate decision-making and situation awareness capabilities in nursing education. Hence, the present study aims to establish trainee students' perceptions of using self-directed learning in nurse training.

Self-directed learning promotes problem-solving abilities in learners. In nursing, problem-solving is a critical ability. Developing this skill is crucial for nurses since it involves an intellectual process that calls for observation and original thought. Critical thinking demands a person's capacity to use this knowledge to discover a solution. Problem-solving competence is the ability to acquire knowledge to reach a solution. Developing problem-solving skills is thought to be a requirement for nurses to function effectively in the nursing profession (Ahmady & Shahbazi 2020:1). Nursing education at the nurse training level should embrace innovative teaching and learning approaches such as self-directed learning to produce nurses with problem-solving abilities.

The capacity to utilise problem-solving abilities results in better patient care, making them essential for nurses (Ancel, 2016:242). To address the complex demands of today's healthcare environments, nurses must demonstrate and use problem-solving and critical thinking skills. Nurses should also be able to adapt to changing conditions and apply their knowledge and skills in various clinical contexts (Ahmady & Shahbazi 2020:1). Interest in the present study was on understanding the use of self-directed learning in developing nursing students’ problem-solving abilities.

Self-directed learning emphasises the importance of self-leadership in learning and the capacity to address challenges independently and autonomously. The ability to actively solve issues with independence and autonomy is a requirement for nurses in the nursing profession (Jo & Hwang 2022:8). According to Bosch, Mentz, and Goede (2019:13), students can take ownership of their education when they engage in self-directed learning. Students who take ownership of their education acquire self-leadership abilities that enable them to function independently and autonomously in the workplace. With the understanding that teaching and learning should instil in students the abilities and values necessary for the nursing profession, the current study sought to understand the use of self-directed learning approaches in nurse education from the perspective of student nurses.

In self-directed learning, students examine their own progress, recognising obstacles and potential solutions (Lee & Mori 2021:138). Reflective practice is crucial in healthcare settings because it has the defining characteristic of reflection consistent with self-directed learning. Barchard (2022:45) cites reflection as a crucial component of every nurse's work, and it is incorporated into the Nursing and Midwifery Council's code of conduct in the United Kingdom. Reflection enables nurses to learn from clinical experiences, adapt, and improve their skills. Nurse education must include self-directed learning to empower nurses to be reflective practitioners from the start of their training.

According to Patel and Metersk (2022:185), reflective practice is a cognitive skill that necessitates an active effort to view a situation while being aware of one's own views, attitudes, and habits. Learning how to learn is a skill that may be applied in the workplace and is taught to students through self-directed learning (Lee & Mori 2021:139). In the healthcare system, where registered nurses who provide direct patient care are required to learn in the constantly evolving modern healthcare environment, the skill of learning how to learn - which is a component of self-directed learning - is essential (Jantzen, 2019:2565). Nursing education and early employment are the first stages in developing nurses into competent professionals capable of ongoing learning through reflective practice. Instilling the values of learning how to learn may not be a goal of traditional teacher-centred teaching approaches in nurse education, even though they may assist students in mastering what is taught (Banerjee, Kumar & Dzousa 2022:1).

Self-directed learning promotes values of lifelong learning as students are equipped with skills and values to continuously and continually learn independently (Tekkol & Demirel 2018:1). In the nursing field, where ongoing professional improvement is required, lifelong learning is essential. Healthcare professionals must regularly update their skills. Continuing education or continued professional development (CPD) enables the renewal and updating of skills in healthcare settings. CPD is fundamental to nurses' lifelong learning and is crucial for keeping nurses' knowledge and skills current (Mlambo, Silén, & McGrath 2021:3).

Self-assessment is a crucial component of self-directed learning as students are exposed to several assessment forms, including peer and self-assessment (Bhandari, Chopra, and Singh, 2020:383). The identification of professional development and educational requirements to enhance patient care is reportedly facilitated by self-assessment of clinical skills in nursing education (Taylor, Bing-Jonsson, Wangensteen, Finnbakk, Sandvik, McCormack & Fagerström 2020:546). Self-assessment should be introduced in nurse education so that graduates can evaluate their competencies in clinical situations and improve for better patient care. The following section discusses the literature on implementing self-directed learning in nursing schools, assessing implications for the nurse educator's role.

2.2.2 Self-directed Learning in Schools of Nursing

In self-directed learning, the task of the lecturer is to encourage student engagement. According to Piva, Skela-Savi, Jovi, Avdi, and Kalender-Smajlovi (2021:1), active learning techniques are essential in nursing education to eradicate passive listening and take an active role in the educational process and obtain the ability to apply information from lectures in a meaningful way. Waldeck and Weimer (2017:247) also point out the shortcomings of the conventional lecture system, where students are merely passive users of information, and how this approach restricts students' ability to apply knowledge to real-life circumstances. The constructivist theory, which informs active learning, emphasises that, for students to learn, they must be engaged with the subject matter. In active learning, students are the main knowledge makers (Cattaneo 2017:144).

In contrast to passive learning, active learning involves students actively participating in

learning. It motivates pupils to participate actively in their education (Abdullah, Zeb, Ullah & Bano 2017:588). Active learning encourages nursing students to practice their abilities outside of the classroom and in it (Abdullah, Zeb, Ullah, & Bano 2017:588). In an active learning environment, pupils are less reliant on the teacher and are more engaged. According to Tezer and Besgul (2014:1186), active learning eliminates the instructor's active role and the students' passive one, and the teacher directs the students where they need to go.

It is expected of the course instructor who encourages self-directed learning to provide students with opportunities to solve problems. Nursing education must offer a learning environment that mirrors real-world practices and encourages them to develop their own problem-solving skills by coming up with their own solutions and searching for and gathering the necessary information to prepare students for technical nursing practice (Jo & Hwang 2022:2). This will allow students to exercise leadership and make logical and critical decisions in a variety of situations. The core of problem-based learning in nurse education is problem-solving, which enables student nurses to deal with clinical situations and practice-based issues (Lang & Parkinson 2023:50). It is, therefore, important to establish how trainee nurses were involved in problem-solving as an element of self-directed learning.

A person's capacity to apply knowledge to discover a solution involves critical thinking, which is a skill associated with problem-solving. According to Ahmady and Shahbazi (2020:2), improving these abilities requires nurses to function well. Therefore, it is important to foster problem-solving skills in nurse education so that they can be applied in the workplace, where nurses work in complex healthcare settings and are exposed to emerging diseases, which require them to diagnose issues and find solutions quickly and accurately (Kanbay & Okanli 2017:315). Therefore, problem-solving skills instruction should start in college and continue in healthcare settings.

Nursing students should be encouraged to think critically, an essential component of self-directed learning. The nurse educator should be able to foster this in students. Students must be challenged in their knowledge to improve this skill, attempting to comprehend how the processing of information and underlying assumptions that can obstruct their decision-making occurs (Raymond, Profetto-McGrath, Myrick & Strean

2018:41). To check how decisions are formed in the day-to-day practice of being and doing nursing; it is expected of students that they, not only study many components of critical thinking but also have access to both fictitious and genuine experiences (Riegel, Martini, Bresolin, Mohallem & Nes 2021:1). The pedagogical approaches used in nursing education should encourage students to think critically at a higher level.

For students to practice problem-solving, creative thinking, and even motivation to become more innovative, critical thinking skills are the fundamental competencies that direct students to hone analysis and reasoning skills (Bangun & Pragholapati 2021:795).

A type of higher-level thinking talent called critical thinking is based on standards that make it easier to evaluate situations and make decisions by considering context-specific factors. Regardless of their field of study, all tertiary education graduates are required to demonstrate the ability to think critically, solve problems, select and handle information, and possess traits like intellectual rigour, creativity, imagination, and ethical values like integrity and tolerance (Bangun & Pragholapati 2021:795). The nurse educator may use a variety of techniques, such as formal writing assignments or brief case studies, that test students' use of reasoning skills and their capacity to organise and communicate their knowledge and, finally, discussions about challenging issues (Bangun & Pragholapati 2021:795).

The nurse educator should involve student nurses in research and presentation as part of nursing education practice that is consistent with self-directed learning. Delivering succinct oral presentations is a helpful and necessary ability for nurses. Competence in oral presentations is vital for healthcare providers to communicate a concept to others, especially those in the nursing profession (Tsang 2018:762). Strong oral presentation abilities influence promotion, leadership, and professional growth, as well as the effectiveness of teamwork among healthcare professionals and the quality of interactions between nurses and their patients (Murillo-Zamorano & Montanero 2018:138). An important part of nurse education to prepare for the working world is how nurse educators include student nurses in studying problems and presenting them appropriately.

Nursing students should be taught to conduct independent research. Therefore, it is crucial to incorporate research into both teaching and learning. To adopt an evidence-based professional practice, it is vital for nurses undergoing training to comprehend the theoretical-practical integration of research knowledge and to cultivate attitudes and skills that allow the translation of this knowledge (Ferreira, Sousa, Nobre, Nunes, Fonseca, Ferreira & Baixinho 2022:1). This is a clear call for a paradigm shift toward research-informed education where students are proactive, learning about and using research skills, and influencing the teams they will lead as authorities in their fields (Cardoso, Baixinho, Ferreira, Nascimento, Pedrosa, & Gonçalves 2021:1). This paradigm shift should not only focus on moving toward evidence-based practice. According to Ommering, van Diepen, van Blankenstein, Jong & Dekker (2020:1129), nurses must be able to adapt to constantly changing clinical environments, manage organisational expectations, and adapt to changes in healthcare settings. Therefore, the involvement of student nurses in research activities as independent knowledge constructors is consistent with self-directed learning.

Due to the fact that nurses are the foundation of the healthcare team, they must be able to collaborate with the other team members and exercise critical thinking and analytical abilities in the clinical setting (Abraham 2021:485). Nursing education must use active learning techniques to give student nurses these skills. The use of cooperative learning techniques guarantees that the student nurses actively participate in the teaching and learning process (Gillies 2016:39). In line with self-directed learning, nurse educators are expected to engage students in cooperative learning by using instructional strategies that let them work in groups and assume joint responsibility for the learning process. The following section reviews the literature on the common teaching and learning used to enhance self-directed learning.

2.3 COMMON TEACHING-LEARNING APPROACHES USED TO ENHANCE SELF-DIRECTED LEARNING.

This section discusses several teaching approaches to promoting self-directed learning among students.

2.3.1 Inquiry-based learning approaches

Students are encouraged to ask questions, explore, and find solutions on their own through inquiry-based learning (Kori 2021:61). By letting students set their own learning objectives and pursue their interests; this method encourages self-directed learning. "Inquiry-based learning" refers to various open-ended pedagogical strategies that facilitate student exploration and investigation, for which there are no right or wrong answers (McKinney 2021:301). These strategies include fieldwork, problem scenarios, research projects, and experiential learning. For instance, during fieldwork, students engage in hands-on learning as they deal with and resolve genuine workplace issues.

For students to have the opportunity to engage in deep learning and support, the development of abilities and dispositions such as critical reflexivity, initiative, and social responsibility, that are recognised as essential to academic practice and to participating in academic communities of practice and inquiry-based learning, should be used (McKinney 2021:311). According to Byker et al. (2017:55), inquiry-based learning (IBL) is a student-centred teaching approach that encourages the growth of logical reasoning. Students who engage in inquiry-based learning are more likely to develop critical thinking skills because they can better ask and/or respond to insightful questions in a way that leads to thorough knowledge (Rejeki 2017:135). It entails self-control, interpretation, analysis, evaluation, and synthesis of an explanation. Critical thinking needs to be integrated into the teaching and learning process in higher education, particularly in academic writing, to help students develop their problem-solving, decision-making and communication skills (Byker et al. 2017:56). The key critical thinking abilities to interpret, analyse, evaluate, infer, explain, and self-regulate are developed in students through inquiry-based learning (Ghaemi & Mirsaeed 2017:91).

2.3.2. Problem-based learning

An instructional approach called problem-based learning (PBL) enables students to learn while actively interacting with essential problems. Students have the chance to work together to solve problems, create mental models of what they are learning, and develop self-directed learning habits through practice and reflection (Yew & Goh 2016:75). The technique places emphasis on the course facilitator presenting an issue to the students,

who then work together to develop steps for addressing the problem until it is resolved. Students are given a chance to actively participate in their learning by solving a problem.

In PBL, students are presented with real-world problems that require critical thinking and problem-solving skills. As the students think through the problem and devise strategies for solving it, they are involved in self-directed learning and take ownership of the learning process (Jabarullah & Iqbal 2019:553).

According to Liu, Du, Zhang and Zhou (2019:44), problem-based learning is superior to traditional teaching techniques because it fosters student enthusiasm for learning, a sense of teamwork, problem-solving skills, analysis, information acquisition and application, and communication abilities. According to Kim and Han (2016:599), education programmes that are conducted to improve critical thinking, self-efficacy, and problem-solving skills among clinical nurses boost patient safety competence. Therefore, it is crucial that nurse education employs problem-based learning strategies.

2.3.3. Project-based learning

Another strategy that encourages self-directed learning is project-based learning. The goal of project-based learning (PBL), also known as project-based education, is to give students the chance to enhance their knowledge and abilities through interesting projects that are based on problems and challenges they encounter in the real world (Holmes & Hwang 2016:449). In project-based learning, students are given lengthy assignments that call for them to use their acquired knowledge and abilities in a practical setting (Hero & Lindfors 2019:502). This method encourages self-directed learning by letting students own the project and choose their own learning objectives.

Project-based learning exposes students to the real world, initiates an extended inquiry process, and strengthens their communication and interdisciplinary learning skills by incorporating various strategies necessary in the 21st century (Belwal 2021:336). The "learning by doing" principle is the foundation of project-based learning, which is commonly regarded as a powerful instructional technique that would increase student motivation and encourage self-directed learning with teachers acting as facilitators (Young & Legister 2018:76). By emphasising a student-centred approach rather than a

teacher-centred approach, project-based learning improves the teaching and learning process. It enables learners to gain information through project work and experience (Sindre, Giannakos, Krogstie, Munkvold & Aalberg 2018:148).

Project-based learning is an innovative, engagement-focused method of learning that can be used in or out of educational institutions (Dean & Forray 2017:312). It emphasises interdisciplinary learning and exposes students to a problem from the real world. Project-based learning has many advantages, including the development of skills like environmental and sustainability awareness, relationship building, adjusting to oneself and others, self-discipline, time and expense management, and planning (Johnsen, 2016:99). Through project-based learning, students also develop other skills such as communication, critical thinking, decision-making, and confidence. The ability to learn for oneself while dealing with various real-world work issues is another advantage of project-based learning (Dean & Forray 2017:312).

2.3.4 Team-based learning

Team-based learning (TBL) is a student-centred method that entails having students work in small groups of five to seven people. It is highly structured with key design components and detailed instructions that the students must adhere to (Burgess et al. 2020:1). Increased student participation in learning, more profound comprehension of subjects, and a sense of accountability for teammates are all benefits of TBL (Burgess et al. 2017:1). TBL also offers the benefits of small-group instruction and learning, uses fewer course facilitators, and emphasises student participation in learning, peer learning, problem-solving, and feedback to the fullest extent possible (Reimschisel, Herring, Huang & Minor 2017:1228).

TBL is a systematic approach to small-group instruction that emphasises student preparation outside of class and knowledge application within it. Before each unit or module of the course, students prepare by reading outside of class (Silva, Lino-Neto, Ribeiro, Rocha & Costa 2022:2311). Students are deliberately organised into varied teams that work together throughout the semester. In a TBL course, the teacher sets the learning objectives and selects the problems that the students will concentrate on. Still, after that, the instructor is a facilitator as the teams work toward a solution to the problem.

Problems must be carefully chosen to identify common student misconceptions. Team members must also constantly interact and debate for learners to compare their current understandings with those of other team members and to create new understandings (Goh, Di Gangi, & Gunnells 2020:1). Team-based learning naturally includes group interaction and a focus on pertinent issues. In teams, the students share ideas and engage in peer and self-evaluation and reflection as the learning process unfolds (Swanson, McCulley, Osman, Scammacca Lewis & Solis 2019:41).

2.3.5 Experiential learning

Villarroel, Benavente, Chuecas, and Bruna (2020:1) claim that one goal of higher education is to help students better use their knowledge to address real-world issues related to their professions. Providing them with opportunities to use their abilities in practical settings is just as important as ensuring that they acquire relevant knowledge (Huang & Jiang 2020:1).

Experiential learning is an effective strategy for bringing about this transformation in higher education because it enables students to apply what they have learned in the classroom to real-world scenarios and develop a thorough comprehension of the subject matter (Guo, Yao, Wang, Yang & Zong 2016:18). This kind of instruction entails giving the student more autonomy and responsibility while also immersing them directly in both the learning process and the environment in which it occurs (Kolb, & Kolb 2017:13). It emphasises the development of students' meta-learning skills and adaptive learning, as well as learning flexibility to include all learning modes for full-cycle learning (Kolb, & Kolb 2017:16).

Experiential learning assists in the easy transition between university studies and the working world. It enables students to make connections between experience and theory (Earnest, Rosenbusch, Wallace-Williams & Keimet 2016:76). Additionally, knowledge acquired through experiential learning is deepened because of the employment of several learning modes, such as the abstract, concrete, reflective, and active (Zhai, Gu, Liu, Liang & Tsai 2017:199). Experiential learning involves acquiring knowledge through capturing and transforming concrete experiences, which gives rise to new abstractions and applications (Kolb 2015:13). It is a continuous process in which learners bring

individual learning needs and experiences to their learning environment and communities. According to Harvey, Coulson, and McMaugh (2016:4), experiential learning is frequently connected to activities linked with practice, such as work-integrated learning, work-based learning, cooperative education, collaborative learning, service learning, professional development learning, internships, and practices.

This section reviewed literature on common teaching and learning approaches that promote self-directed learning. The next section reviewed literature on the benefits that students derive from self-directed learning.

2.4 THE BENEFITS STUDENTS DERIVE FROM SELF-DIRECTED LEARNING APPROACHES

Students benefit from using self-directed instructional techniques because they develop responsibility throughout training, a skill they can utilise in the workplace. According to Bosch, Mentz, and Goede (2019:14), in self-directed learning, students take charge of their education and do not rely solely on the lecturers to help them learn. During their training, nursing students must learn about responsibility (Aydin, Sehiralti, & Akpinar 2017:241). Students would benefit from learning to take ownership of their learning if nurse educators used self-directed learning methodologies. After training, it would be easy for the students to become responsible healthcare providers.

Students who are exposed to self-directed learning benefit from being autonomous learners who will grow into autonomous professionals. Learner autonomy, according to Gharti (2019:65), refers to a person's psychological ability to examine their own learning potential, the capability to make decisions about their learning, and the exercise of freedom of choice. According to Nouri, Jouybari, and Sanagoo (2017:472), professional autonomy in the nursing field entails independence from other people, as well as knowledge, competence, self-governance, decision-making, freedom, supporting patients and developing a friendly relationship with them, judgment, self-control, and responsiveness. According to Rouhi-Balasi, Elahi, Ebadi, Jahani, and Hazrati (2020:276), the definition of autonomy for nurses is the capacity to apply professional knowledge to patient care and clinical decision-making.

Students gain a deeper knowledge of subjects when self-directed learning methodologies are used, yet another benefit of self-directed learning. As an instructional strategy, active learning entails actively involving students in the course material through conversations, problem-solving, case studies, role plays, and other techniques (Bernstein 2018:298). Self-directed learning is a type of active learning. Harris and Bacon (2019:141) point out that active learning methods place more responsibility on the learner than passive methods like lectures. Students gain a deeper and more comprehensive understanding of concepts by actively participating in the course material and learning activities. Thus, it was necessary for the current study to investigate how students viewed the advantages of their active participation in learning.

Students benefit from using self-directed learning strategies by cooperating and collaborating with one another. The exchange of ideas through direct interaction fosters knowledge development in students. When students collaborate to learn, they actively engage in the process rather than passively absorbing what the course instructor says (Sidgi 2022:218). Working together is a key component of the nursing profession, as stated by Johnsen (2016:99), and student nurses ought to nurture this critical skill during their training. The advantages of exposing students to the cooperative and collaborative learning approaches offered by self-directed learning should not be overlooked.

Students can acquire critical time management skills through self-directed study to their benefit. Students who can effectively manage their time are more likely to demonstrate consistent engagement in learning activities and to complete course assignments on time (Er 2022:1). Time management is an important self-regulation strategy that can improve student learning and lead to higher performance. Nurses must make timely decisions and complete tasks more intelligently to provide patients with timely, high-quality treatment (Vizeshfar, Rakhshan, Shirazi & Dokoohaki 2022:202). This makes good time management a crucial ability in nursing practice. Students benefit from self-directed learning because it helps them develop time management skills that are transferable to the workplace.

Students gain confidence in learning by taking control of their education through self-directed learning. As long as students remain accountable for their learning, self-esteem rises, and an inquisitive mind develops (Knowles 1975). Since students are active

learners rather than passive recipients of knowledge, the quality of confidence is ingrained in the learning process. In actual practice, nurses must demonstrate high assurance when interacting with patients and providing high-quality care. Nursing standards of conduct require nurses to have confidence in their nursing skills and practice. Confidence is defined as believing in one's ability to achieve a goal or complete a task, and nurses must be competent and able to perform tasks independently, as a lack of confidence can easily compromise that ability (Makarem, Heshmati-Nabavi, Afshar, Yazdani, Pouresmail & Hoseinpour 2019:261).

Students who are exposed to self-directed learning strategies gain valuable leadership abilities. According to Bosch, Mentz, and Goede (2019:16), self-directed learning tasks should be designed so that they can inspire students to direct their learning and, in the process, develop leadership skills that encourage them to believe in their own abilities and advance to a higher level of self-regulated learning. In the field of nursing, nurses are expected to take the initiative in all aspects of their profession (Dickerson 2019:300). A benefit of self-directed learning methodologies that can be applied in the workplace is the development of leadership abilities.

Students benefit from self-directed learning strategies because they can use their knowledge and skills. In self-directed learning methods, students are exposed to real-world challenges and apply their knowledge and skills to resolve them (Robinson, 2020:294). According to Rafii, Nasrabadi, and Tehrani (2021:142), nurses need practical and theoretical skills to function effectively in clinical settings. As a result, students who engage in experiential learning during their nursing education obtain transferable abilities that benefit the workplace.

Improving students' communication skills is another advantage of self-directed learning strategies. In an active learning environment, students actively construct information as part of the learning process. They also strengthen their oral and written communication skills by engaging in collaborative partnerships that help them take the lead in their learning (Nasri 2017:165). One of the most crucial professional and ethical nursing attributes is effective communication between a nurse and patients and between a nurse and other nurses (Griffiths 2017:594). Students improve their communication skills with other students and course instructors by working cooperatively with others to pursue

knowledge. These abilities are essential for preparing for a job setting that values good communication.

This section reviewed literature on the benefits students derive from self-directed learning approaches. The next section reviews literature on factors that promote self-directed learning in higher education in general and in nurse education in particular.

2.5 FACTORS PROMOTING SELF-DIRECTED LEARNING IN HIGHER EDUCATION

Many factors promote self-directed learning in higher education and nurse education in particular. This section discusses some of these factors.

2.5.1 Deliberate choice of appropriate teaching and learning techniques

Self-directed learning is promoted when nursing educators deliberately choose teaching and learning techniques, such as team-based learning, in their preclinical and clinical programmes (Ghasemi, Moonaghi, & Heydari 2020:109). Nurse educators would then be aware of the importance of involving students in collaborative and cooperative learning and would really engage students in learning. This would be different from instances where the nurse educator would just rely on the lecture type of instruction where students are passive recipients of knowledge. As noted by Pivač, Skela-Savič, Jović, Avdić and Kalender-Smajlović (2021:3), the nurse educator should be aware and knowledgeable of the effective teaching methods to utilise to engage trainee students in learning as active and self-directed learners.

Realistic simulation is a strategy of nurse education that uses technologies to replicate scenarios that simulate the practice in a managed and realistic environment (Janicas & Zanon 2019:2). A nurse educator who seeks to involve students in the learning as active learners who are prepared to deal with real healthcare environments may be involved in a realistic simulation. Nursing students can actively participate in the learning process using self-directed learning approaches. This allows them to practice thoroughly, learn from mistakes, reflect on their learning, and evaluate products and processes. As a result of these active methods of teaching and learning, nursing students can apply their newly acquired knowledge and skills to provide safe patient care (Francis & O'Brien 2019:453).

2.5.2 A Supportive Learning Environment

When students feel encouraged by their teachers, peers, and the general learning environment, they are more likely to engage in self-directed learning (Pan & Chen 2021:2). This may be accomplished by providing them with compelling learning experiences and environments. According to Salleh, Zulnaidi, Rahim, Zakaria, and Hidayat (2019:170), this assistance can take many different forms, including setting clear expectations, providing guidance and feedback, and fostering a collaborative and welcoming learning environment. When nurse educators in nursing education create learning settings that expose students to active learning and engaging activities, students' self-directed learning is supported. Active learning encourages students to take charge of their education by making them feel involved and capable and increasing their willingness to work through complex content and activities (Hyun, Ediger, & Lee 2017:110).

While the lecture technique is simple to use, saves time, and enables the lecturer to impart material to many students at once (Woodring & Hultquist 2017:145), there is a need to provide an environment that allows students to be actively involved in learning. Teaching strategies should enable nursing students to integrate the theory they learn in class into clinical practice as well (Abdullah, Zeb, Ullah & Bano 2017:588). Nurse educators must remove students from screen slides and involve them in using knowledge in practical life and in participating actively to change the situation. Students' performance is improved, they are better able to learn and apply when an enabling environment is offered, and they are encouraged to actively participate in learning in classrooms and clinical settings (Abdullah, Zeb, Ullah, & Bano, 2017:590).

2.5.3 Access to resources

Students should have access to learning materials, and their participation in self-directed learning impacts the availability of resources. Students who are engaged in SDL must access course materials more frequently. Self-directed learners regularly explore the online learning platform for resources (Kizilcec, Pérez-Sanagustn, & Maldonado 2017:22). Student engagement in self-directed learning is only possible when resources, including digital ones, are easily accessible to students, as further emphasised by Charokar and Dulloo (2022:136). Students should have access to resources and be able

to conduct independent research to obtain information. This approach encourages students to develop the crucial lifelong skill of learning how to learn (Badyal, Lata, Sharma, & Jain 2020:236).

According to Song and Bonk (2016:2), for self-directed learning to flourish, students must have access to computers and the internet to use the many Open Educational Resources (OER) available online. Additionally, for students to succeed in self-directed learning, they require access to a wide range of resources, which includes high-quality textbooks, journal articles, online databases, and academic support services (Gerard, Wiley, Debarger, Bichler, Bradford, Linn, 2022:262). Therefore, it is essential that resources be made available to nursing students in nursing schools. Additionally, it is necessary to provide access to online learning materials so students can use the internet to research and advance their education.

2.5.4 Support from educators

Educators should assist students in self-directed learning by giving them direction, criticism, and encouragement. Educators can encourage students to set learning goals and assist them in identifying what they want to learn and why to help them stay motivated and engaged (Ohashi 2018:238). This will help create a learning atmosphere suitable for independent study. Educators should allow students to practice self-directed learning and assign tasks that call for them to gather and assess knowledge, address issues, and produce presentations (Mynard 2016:333). Educators should also give students feedback on their SDL efforts and assist them in identifying their learning strengths and limitations to help them develop self-directed learning skills (El-Nabawi & Shaalan 2019:552).

The academic performance of student nurses is determined by the assessment of competence, which is determined by a student's capacity to exhibit the performance of professional skills or behaviours (Alshammari, Saguban, Pasay-An, Altheban & AlShammari 2017:60). This emphasises the importance of educator support in nursing education. A higher-order learning result and the exhibition of professional skills and behaviour can only be attained when nurse educators reorient their teaching methods to promote active learning and allow students to pursue their own learning interests. When

students are actively involved in their education and have control over what they learn, how they learn, and when they learn it, higher-order learning outcomes are more likely to be obtained. Offering various courses, tasks, and learning activities can help achieve this (Holmes 2018:142).

2.5.5 Exposure to different learning approaches

Students who are exposed to a variety of learning methods develop holistically because, while some methods such as lectures encourage surface learning, more independent learning methods encourage deep learning (Alsayed, Alshammari, Pasay-An & Dator 2020:44). Students will also be able to build abilities and competences that are practical in the workplace after they use learning methodologies that encourage deep learning, according to Alshammari, Saguban, Pasay-An, Altheban, and AlShammari (2017:60). Since it will be decided to actively engage students as part of a bouquet of learning techniques, the ability of educators to expose students to various learning approaches encourages self-directed learning.

This **section reviewed literature** on factors that promote self-directed learning. The next section focuses on factors that hinder self-directed learning.

2.6 FACTORS HINDERING SELF-DIRECTED LEARNING IN HIGHER EDUCATION

Numerous factors can hinder self-directed learning in higher education, and some of them are discussed in this section.

2.6.1 Lack of resources

Since self-directed learning calls for students to engage in learning activities like accessing information freely and easily, materials must be accessible (Mathana & Galdolage 2023:3). The difficulty of autonomous learning arises when students lack access to resources. Students should have the necessary technological equipment and internet access to engage in self-directed learning in the contemporary technology-enhanced learning environment (Adarkwah 2021:1665). Therefore, a lack of resources hurts students' engagement in self-directed learning.

A self-directed learner can engage in learning by independently looking for ways to

acquire information (Yilmaz 2016:375). However, this information can only be acquired if there are resources and the students know where to find them. The lack of high-quality teaching and learning resources affects higher education in many other Sub-Saharan countries (Mtebe & Raisano 2014:249). Self-directed learning is hampered without high-quality teaching and learning materials since students cannot access the educational resources needed to expand their knowledge.

2.6.2 Lack of appropriate educator and learner roles

It is necessary to rethink the responsibilities of the educator and learner because teaching and learning in a self-directed learning environment differ from those that exist in a teacher-centred one (El-Nabawi & Shaalan 2019:549). When the teacher dominates the teaching and learning process and expects students to be passive listeners, it creates a barrier to self-directed learning. The role of the educator should change to one of a facilitator of learning who anticipates active participation from the pupils (Khodary 2017:128). Self-directed learning will not be possible if the educator and student roles are not redefined and carried out properly. While Qamata-Mtshali and Bruce (2018:277) argue that self-directed learning readiness is not linked to any teaching approach, it is crucial to employ strategies that promote self-directed learning.

When nurse educators are not self-directed learners themselves, self-directed learning may be difficult to implement. Nurse educators should serve as role models for their students to become independent learners by practising self-directed learning and using various strategies to help them get ready (Van Rensburg & Botma 2015:1). As self-directed learning role models, nurse educators can help students develop these abilities. Encouraging self-directed learning in nurse education may be difficult if the nurse educators do not understand it and are not self-directed learners.

2.6.3 Lack of self-directed learning skills

Lack of student abilities may hurt self-directed learning. According to Tekkol and Demirel (2018:5), specific abilities such as time management, research, and critical thinking are required for students to be autonomous learners. It becomes challenging to apply self-directed learning successfully when some students might not have the abilities or

knowledge required to learn well on their own. Self-directed learners possess traits like initiative, self-motivation, self-control, willingness to learn, openness to learn, and self-monitoring, among others (Knowles, 1975 cited in Tekkol & Demirel 2018:2). The traits mentioned are necessary for self-directed learning to be successful.

For self-directed learning to be viable, students must be able to establish a close, respectful, and conducive learning relationship with other learners (Tekkol & Demirel 2018:2). Students should, in certain ways, be team players and refrain from showing individualistic tendencies that can compromise the demands of self-directed learning. It will be difficult for students to become self-directed learners if they lack the necessary abilities and qualities.

2.6.4 Lack of motivation

Students should be motivated to learn to succeed as self-directed learners. Self-directed learning may be hampered by some students' lack of motivation, which can be brought on by a variety of factors, including feeling overburdened by their workload, not being interested in the subject matter, or failing to see how the subject matter relates to their long-term objectives (Morris 2019:633). Therefore, educators should look for ways to inspire students to study independently, set goals, look for knowledge, share information, and solve problems. Self-directed learning is impossible without motivation, either intrinsic or external.

According to Durnali (2020:129), students who lack self-motivation cannot succeed with self-directed learning, which calls for self-leadership. To build self-direction and self-motivation, which are required to generate desirable behaviour and performance associated with self-directed learning, students should be able to manage their own internal and outward behaviours (Eckton & Palfreyman 2017:23). Therefore, a key component of self-directed learning is self-motivation, which is demonstrated in self-leadership. When pupils lack self-motivation, self-directed learning is impossible.

2.6.5 Lack of support

Students require the assistance of their peers and course facilitators to succeed in self-

directed learning (Demir & Lhan 2022:174). Self-directed learning incorporates a mindset that empowers students to assume ownership of their learning experiences (Van Der Walt, 2019:1). Van Wyk (2017:5) emphasises the significance of encouraging students to pursue their learning. To this end, it is essential for course facilitators to provide students with the assistance they need for self-directed learning because a lack of such support negatively influences students' participation in self-directed learning.

The fundamental tenet of self-directed learning is that students assume responsibility for learning well beyond what is offered by their course instructors and the curriculum (Robinson & Persky 2020:292). Such high expectations for students necessitate establishing a structured and continuous support system. As a result of improved levels of control, confidence, and self-belief in the educational process, students who receive enough assistance acquire a sense of autonomy, mastery, and purpose (Robinson & Persky 2020:293). Therefore, learners' ability to engage in self-directed learning may suffer greatly without sufficient support.

Having discussed the literature germane to the study, the next section interrogates the theoretical underpinnings of the study.

2.7 THEORETICAL FRAMEWORK

The social constructivist and transformative learning theories, which served as the foundation for the current study, are covered in this section. The relationship between the two ideas and how each one supports the current study is demonstrated. The theoretical framework provides the context and support for the issue statement, purpose, and meaning of the research as well as the research questions (Rudasill, Snyder, Levinson & Adelson 2017:44). The theoretical framework gives the literature review, methodology, and analysis a solid foundation or anchor point (Grant & Osanloo 2014:14). According to Philipsen (2018), there is need for a theoretical framework, without which a study is of "limited usefulness of findings and conclusions." Figure 2.2 summarises the theoretical underpinnings of the study.

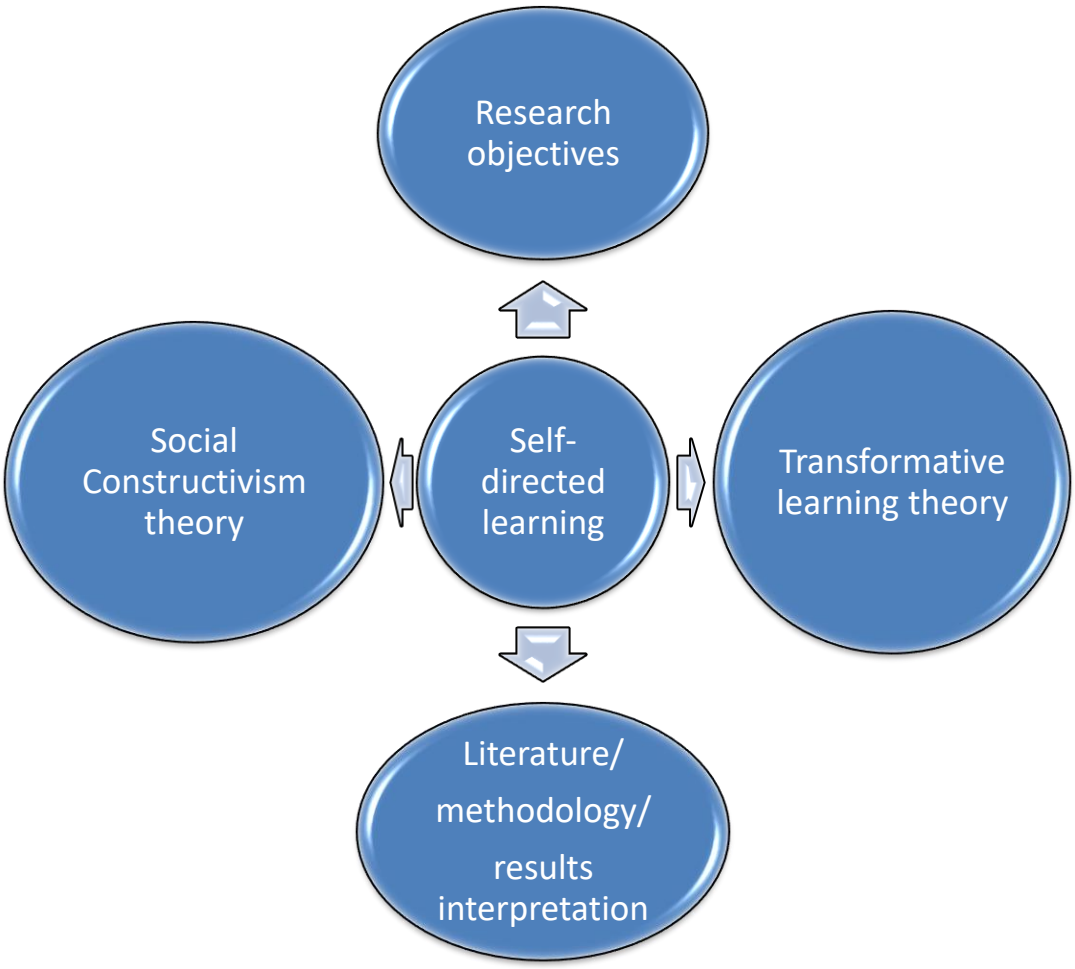


Figure 2.2: Theoretical underpinnings of the study (Researcher's own)

As shown in Figure 2.1, the study was informed by two theories: the social constructivist and the transformative learning theories. The two theories informed various aspects of the study, such as the selection of research objectives, areas for literature review and methodological aspects, and results interpretation, as shown in section 2.7.3 of this Chapter. The next section discusses the social constructivist theory as a theoretical underpinning of the present study.

2.7.1 Social Constructivist Theory

Social constructivist theory by Vygotsky served as one of the study's theoretical foundations. The theory promotes the idea that learning involves students actively participating in the creation of knowledge in a social setting through social interaction (Daneshfar & Moharami 2018:600). In addition to reading, writing, and discussing,

students also need to solve issues and do higher-order thinking tasks including analysis, synthesis, and evaluation. Students' investigations of their attitudes and beliefs should be prioritised in active learning practices. They should be involved in doing things and reflecting on what they are doing (Ribeiro-Silva, Amorim, Aparicio-Herguedas & Batista 2022:3). Emphasis is placed on students' active participation in the learning process within the social constructivist learning paradigm.

The social constructivist theory emphasises the importance of social context in learning. The sociocultural perspective on education originates from Lev Vygotsky's work. It is an approach that considers the individual and their interaction with the social environment as central to understanding the processes of learning (Király & Buttelmann 2017:1). Learning occurs through the interaction among the individual, environmental factors, and the social context in which learning occurs (Schreiber & Valle 2013:10).

The social constructivist theory emphasises the value of social interaction in learning. According to social constructivism, learning happens through social interaction and the assistance of others, frequently in a group, and it is believed that social interaction shapes the knowledge that a person acquires (Bozkurt 2017:211). Social constructivists, thus, view the process of knowing as the core of social interaction that results in higher degrees of reasoning and learning (Finnegan & Ginty 2019:2). The aforementioned perspective is in line with Dewey's assertion that "education is essentially a social process" (Dewey 1938:5). The goal of the current study was to demonstrate the advantages of self-directed learning strategies, and the theoretical foundations of the study allude to the connection between social engagement and better learning.

Learning should be learner-centred according to the social constructivist theory (Buchem, Tur, & Hoelterhof 2020:114). The main areas of attention for SCL are the development of students' competencies, the processes of knowledge building and acquisition, and a persistent and proactive attitude towards learning (Dakovic & Zhang 2020:563). Higher education institutions should be committed to fostering the development of responsible, critical citizens who can meet the needs of contemporary society while also growing personally and professionally through lifelong learning (Wong, Baars, Davis, Van Der Zee, Houben & Paas 2019:361). The way student nurses perceived student-centred learning was another focal element of the present study.

The social constructivist learning theory emphasises the collaborative co-construction of knowledge (Bozkurt 2017: 211). Students collaborate with their peers to co-construct knowledge during the learning process, and they not only contribute to creating material and knowledge but also gain skills through cooperation and communication (Gu 2021:102; Ralston, Tretter, & Kendall-Brown 2017:96). In the framework of the current study, which was influenced by aspects of the social constructivist theory, it was necessary to ascertain students' opinions on typical strategies used to promote self-directed learning and the advantages associated with such strategies.

The Zone of Proximal Development (ZPD), as described by the social constructivist learning theory, is where students learn. According to Vygotsky (1978:86), the ZPD is the gap between what a learner can accomplish on their own and what they can accomplish with the support and encouragement of a skilled partner. To quote Vygotsky, ZPD is "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers" (Vygotsky 1978:86). The student's ability to solve problems and exercise critical thought should be improved with the aid of peers and the course instructors.

According to the social constructivist approach, the More Knowledgeable Other (MKO) plays a significant part in learning. According to Vygotsky, the "More Knowledgeable Other" (MKO) is someone who is more knowledgeable than the learner, particularly in relation to a given task, idea, or procedure (Vygotsky 1978:92). The MKO is typically pictured as a teacher or an elderly person. According to the Vygotskian perspective, we learn best when we are surrounded by other individuals who are more aware of specific historical and cultural customs (Abtahi 2017:35). In the context of the present study, SDL should be implemented by an experienced and knowledgeable course instructor who knows when and how to involve students in learning.

According to Akpan, Igwe, Mpamah, and Okoro (2020:49), social constructivism is collaborative learning based on student interaction, discussion, and sharing. It is a teaching strategy that allows for various groupings and interactive methods, including whole-class discussions, small-group discussions, or students working in pairs on predetermined projects or assignments. The fundamental tenet of the theory is that

students share ideas in groups while brainstorming to find causes and effects, solutions to issues, or just to add something new to their body of knowledge (Thoib 2021:437). The social constructivist theory's influence on how students participated in collaborative learning was one of the study's main focus.

This section covered social constructivism's key ideas as the theoretical framework for the present study. The subsequent section discusses transformational learning theory and the influence of the two theories on the study.

2.7.2 Transformational Learning Theory

In the 1970s, Jack Mezirow developed a learning theory known as transformative learning, which emphasises the value of critical reflection and the transformation of one's worldview. Since then, it has been used in a variety of educational contexts, including adult education, higher education, and professional development (Mezirow 1997:5). Several instructional approaches to embrace active learning and encourage critical reflection were chosen with the help of transformational learning theory (Mezirow 1997:7). Mezirow discovered that education and critical reflection could modify what is already known and understood to help learners understand new concepts and ideas (Epp, Reekie, Denison, de Bosch Kemper, Willson & Marck 2021:806).

There are three stages to transformative learning. It is affected and supported by antecedents such as democratic educational ideas, inspiration, and cognitive and emotive perspectives. Uncomfortable circumstances, perplexing decisions, and challenges to one's worldview are catalysts for the first stage of transformative learning, described as "expanded awareness through self-reflection" (Ruslai & Salam 2016:323). Expanded awareness, as it relates to the nursing profession, occurs when nursing students open their minds to actively seek more knowledge and understanding to deal with a challenge and when the individual understands and connects with the world outside of their own to get a bigger picture of knowledge (Stacey, Oxley, & Aubeeluck 2015:525).

Self-reflection, a self-understanding method involving taking a step back and considering one's own views and presumptions about learning, is a component of expanded

awareness (Ruslai & Salam 2016:324). There is a trigger for increased awareness, which is often a series of descriptions of situations that need explanation and resolution and are used to contextualise real-world occurrences (Ruslai & Salam 2016:325). The process of being intellectually motivated to engage in transformative learning activities is known as inspiration. Inspiration may be thought of as a force or influence that motivates students to think critically and learn (Epp, Reekie, Denison, de Bosch Kemper, Willson & Marck 2021:809).

According to Ruslai and Salam (2016), the second phase of transformative learning is a "meaningful, interactive, integrative, and democratic construction process." Learning with a purpose is called meaningful learning because it enables students to give the world around them greater meaning and encourages the creation of knowledge from their experiences, emotions, and interactions with other students (Dreifuerst 2015:271). The students are actively involved in dialogue, arguments, and discussions with the transformational learning material to generate meaning in interactive learning, which is a dynamic, real-world approach to learning (Epp, Reekie, Denison, de Bosch Kemper, Willson, & Marck 2021:810). Students can gain a deep awareness of the many relationships within a topic through the process of "integrative learning," which connects various disciplines in a detailed way (Ruslai & Salam 2016:325). Democratic knowledge creation is the learning process built on the principles of shared experience, equality, adaptability, responsibility, and self-determination to help learners develop emancipated and responsible attitudes (Dreifuerst 2015:272).

Metacognitive development, or the third stage of transformative learning, is characterised by authenticity, democratic vision, self-direction, and self-actualisation (Ruslai & Salam 2016:325). Authenticity refers to an accurate representation of qualities, commitments, sincerity, devotion, and intentions. Metacognition is a higher-order thinking that requires active control over the cognitive processes involved in learning and is essential for successful learning. (Epp, Reekie, Denison, de Bosch Kemper, Willson, & Marck 2021:810) Authentic nursing students exhibit personal dedication, high levels of involvement, and realistic intentions and are lifelong learners. Self-directedness refers to learners who actively work in an independent and explorative way on transformative tasks, with little facilitator support, to acquire knowledge and skills. In contrast, democratic vision

is the tolerance and willingness to cooperate with others based on equality (Stacey, Oxley, & Aubeeluck 2015:526).

Transformative learning can make a difference in nursing students. After participating actively and critically in an interactive and democratic process of knowledge construction, nursing students transform into autonomous-thinking citizens who make logical decisions and solve problems using newly acquired clinical reasoning skills based on evidence (Tsimane & Downing 2020:271).

As stated by Mezirow (1997:5), one of the benefits of advanced transformative learning is students' increased self-awareness. Learning that is transformative can assist students to become more conscious of their own presumptions, biases, and attitudes. This may result in a better awareness of oneself and the environment around them (Mezirow, 1997:5). As healthcare professionals worldwide provide care for an increasing number of culturally and linguistically diverse patients, training that increases healthcare professionals' awareness of their own cultural features is crucial to facilitate communication between healthcare professionals and patients (Kaihlanen, Hietapakka, & Heponiemi 2019:1).

Transformative learning makes students more adept at detecting and overcoming obstacles in the actual world, enhancing their problem-solving abilities (Meizrow 1997:14). Transformative learning practices give students the skills to recognise and question presumptions, think critically, and come up with original answers. The growing complexity of the healthcare system necessitates having nurses who can solve problems at a high level of clinical decision-making. This problem-solving activity emphasises characterising patient problems and choosing the most effective therapeutic strategies (El-Demerdash, Ibrahim, & Elhosany 2021:304). The following section discusses how the social constructivist and transformative learning theories informed the study.

2.7.3 How the Social Constructivist and transformative learning theories Informed the present study

The ways the two theories inform the present study are summarised in Figure 2.3.



Figure 2.3: Influence of theories on the present study (Researcher's own).

2.7.3.1 Focus on students as a unit of analysis

The two theories focus on how students learn, with the social constructivist one viewing learning as a social process where the learner actively works with others to co-create and share knowledge (Daneshfar & Moharami 2018:600). Similarly, the transformative learning theory focuses on how the learner learns through critical reflection and modifying what is already known and understood (Epp, Reekie, Denison, de Bosch Kemper, Willson & Marck 2021:806). Because of the focus on how learners learn in both theories, the present study sought to study learners, with the unit of analysis being trainee nurses in selected nursing schools and their perceptions of self-directed learning

drawing from their experiences as major stakeholders in nurse education.

2.7.3.2 Literature review aspects

Some tenets informed the review and unpacking of the concept of self-directed learning of social constructivism, such as social interaction in learning, collaboration, and active learning. Similarly, the transformative learning theory informed the literature review on self-directed learning with its tenet of critical reflection in learning. The section of the literature review that focused on common teaching and learning approaches in self-directed borrowed heavily from issues drawn from the two theories. The two theories both merge on the benefits students draw from being active learners, which were extended in the literature review. They revealed issues such as developing critical thinking, autonomous learning and problem-solving skills, among other benefits.

2.7.3.3 Research questions coining

The present study was conducted with four guiding research questions, as stated in Section 1.4 in the first Chapter. The first research question on understanding self-directed learning borrowed heavily from the two underpinning theories. Given how the two theories viewed learning, it was deemed important to establish how the students viewed self-directed learning and drew links with the views advanced in the two theories. The second research question on common teaching and learning approaches in self-directed learning was informed by both theories. It sought to establish how the approaches utilised linked with the aspects raised in the two theories and served as underpinnings of the study. As espoused in the two theories informing the study, learning should benefit students who should be active and not merely passive recipients of knowledge. Hence, it is essential to establish the benefits that students perceive of SDL. The two theories also influenced the last research question on factors promoting or hindering self-directed learning, as it was apparent in the theories that there were conditions necessary for effective learning from the social constructivist and transformative learning orientations.

2.7.3.4 Shaping significance of the study

The significance of the study, as highlighted in Section 1.10 of the first Chapter, was also informed by issues raised in the two theories. The two theories have critical implications for the role of the nurse educator in facilitating self-directed learning as informed by social constructivism and transformative learning. The study is important to nurse educators as they reflect on their roles and how they can promote active learning, critical reflection, collaborative learning, self-awareness, autonomous thinking, and problem-solving abilities in nursing students. Similarly, the study is important to nursing students as they reflect on their roles in a self-directed learning environment.

2.7.3.5 Informing methodological procedures

In understanding how learning occurs as informed by the social constructivist and the transformative learning theories, there was a need for a detailed and in-depth study, hence the selection of a qualitative approach informed by the interpretivist paradigm as described and justified in Section 3.5 of the third chapter. Learning is a personal experience, and it is necessary to understand it from the participant's perspective. The selection of the interview method was also consistent with the desire to establish views about self-directed learning from the nursing students who were the selected participants deemed 'information-rich' sources.

2.7.3.6 Data analysis and interpretation

The data collected from the interviews were analysed using the thematic content analysis spelt out in Section 3.9 of the third chapter. The data analysis method was consistent with the nature of qualitative narratives that would have to be deconstructed to make meaning of what the students were saying about self-directed learning, borrowing the lens of interpretation from the two theories that served as the study's theoretical underpinnings. It is clear from the foregoing discussion that the selected theories were pivotal in influencing the different areas of the present study.

2.8 CONCLUSION

The research involved a review of the literature pertinent to the study in this chapter. The sections of the literature study were purposefully chosen to align with the issues that were brought up in Section 1.4 of the first chapter's research questions. This was done to verify relatedness and relevance during the review process. Before 'joining the dialogues,' the idea of self-directed learning was explained, outlining its components and how it relates to nursing education. The researcher then reviewed academic articles on common teaching and learning strategies for self-directed learning. Research on the advantages of self-directed learning and the things that help or impede it was also examined. The chapter also covered the social constructivist and transformational learning theories that served as the study's theoretical frameworks, outlining each theory's key principles before demonstrating how each framed the research. The study's methodology is the main focus of the following chapter.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter covers the study design and methodology, including data collection, population and sample, and measures to ensure trustworthiness and ethical issues.

3.2. RESEARCH OBJECTIVES

Research objectives often consist of a list of the desired outcomes (Burns & Groove 2018:103)**.** The study sought to address the following research objectives:

- To explore student nurses' viewpoints regarding the use of SDL during their training.
- To describe learning approaches used to enhance self-directed learning in selected schools and
- To determine barriers to using self-directed learning in selected nursing schools

3.3 THE RESEARCH DESIGN

Research design is a set of logical steps the researcher takes to answer the research question. It forms the blueprint of the study (Brink et al. 2018:92). According to Polit and Beck (2018: 273), there are five common qualitative designs which researchers use, namely ethnography, phenomenology, grounded theory, historical research, and exploratory-descriptive research. Ethnographers seek to learn from cultural group members to understand their worldviews (Polit & Beck 2018:274). Phenomenological research describes participants' experiences, commonly known as "lived experiences" (Burns & Groove, 2018:127). Grounded theory develops theories about social processes grounded in real-world observations (Brink et al. 2018:107). Historical research examines past events from the perspectives of the present day. It analyses past events in the context of time, social structures, concurrent events, and key individuals (Polit & Beck, 2018:551). Exploratory, descriptive research explores and describes a topic of interest and develops participants' definitions of concepts that researchers want to

measure (Burns & Grove 2018:134).

This study followed an exploratory, descriptive qualitative design. Using an exploratory, descriptive qualitative design in self-directed learning provided an understanding of the phenomena that allowed the researcher to explore and describe the processes in learners' self-directed learning. An exploratory, descriptive qualitative design enabled the researcher to probe deeply into students' self-directed learning experiences, uncovering the diverse strategies, motivations, challenges, and outcomes that learners encounter (Burns & Groove 2017: 66).

3.3.1 Exploration

This design aims to explore and learn more about the phenomena being studied. According to Polit and Beck (2018:46), exploratory researchers start with interesting phenomena, but instead of just describing it, they investigate the phenomenon's nature, how it manifests, and other aspects connected to it, such as variables that might be the cause. Exploratory qualitative designs offer flexibility, allowing the researcher to adapt to emerging insights and unexpected findings. This flexibility is valuable in studying self-directed learning, where contexts can vary widely among participants, such as self-directed learning during the training of nurses. Information derived from the participants' points of view enabled the researcher to assess participants' comprehension of the phenomena.

3.3.2 Description

The descriptive design helped provide a detailed description of self-directed learning. This involved capturing learners’ perceptions, their decision-making processes, and the impact of various learning approaches. Descriptive design is used to investigate the nature of a phenomenon that is poorly understood. Qualitative approaches can be applied to explain the meaning of the phenomena (Polit & Beck, 2018:46). Polit and Beck (2017:741) describe the qualitative as "the investigation of phenomena, typically in an in-depth and holistic fashion, through the collection of rich narrative materials using a flexible research design". Characteristics of qualitative designs are noted in Creswell and Creswell (2018:62) and applied in this study using semi-structured interviews. They

aided the researcher in obtaining a holistic understanding of the different teaching strategies educators employ, and facilitate students' active involvement in learning.

3.4 STUDY SETTING

The study setting is the physical and social context in which data collection takes place in a study (Polit & Beck 2018:569). The study sites were the two nursing institutions in Eswatini. The two institutions were chosen because of their differences: one nursing school is government-operated, and a church privately runs the other. However, for both, the guidelines provided by the national legal frameworks should be used to manage educational affairs.

3. 5 RESEARCH METHODOLOGY

According to Creswell (2018:50), research approaches are research plans and procedures that provide detailed data collection methods, analysis, and interpretation and involve several decisions. This study primarily used a qualitative research approach to assess and analyse the reality surrounding the phenomena under investigation for more excellent knowledge. A qualitative research approach is connected to the interpretive research paradigm used to understand the world from a subjective, individual perspective (Polit & Beck, 2018:277). Qualitative research focuses on the individual human with particular and significant human relationships. It offers a thorough and in-depth comprehension of meanings, actions, intents, and behaviours (Brink et al.018:104).

First, this study used the qualitative research method to understand the meanings the participants ascribed to their self-directed learning experiences. The main reason for using a qualitative research approach is that it enables participants to be actively engaged during interviews. Secondly, the qualitative approach was chosen because, according to Creswell and Creswell (2018:51), the use of qualitative research can offer better insight into human experience and behaviour. Researchers may get rich data on people's ideas, feelings, and motivations through qualitative research. This information may then be utilised to create ideas about how people behave and specify areas requiring more study.

3.5.1 Population

The target population is the whole population to which a researcher wants to generalise the study results (Polit & Beck 2018:71). For this study, the target population included all registered nursing students enrolled at the two nursing university schools doing four-year degree programs and in their final year of study in Eswatini.

3.5.2 Sampling Procedures

A sample is a part or fraction of a whole or a subset of a large set selected to participate in the research study (Creswell & Creswell 2018:517). Purposive sampling was used in this study. According to Polit & Beck (2018:245), a purposive sample involves using the researcher's knowledge about the population to handpick sample members. This agrees with Brink et al. (2018:126), who assert that this technique is based on the researcher's judgment regarding subjects or objects typically representing the study phenomenon or knowledge about the question. In this study, final-year students were selected to participate because they were deemed information-rich sources with the knowledge and experience to provide rich information.

3.5.2.1 Eligibility Criteria

The criteria specify the characteristics of the target population and are used to choose participants for research (Burns & Groove, 2017: 518). In this study, students were enrolled in the selected university nursing schools in their final year.

Inclusion Criteria

Inclusion criteria refer to qualities a potential participant needs to possess to be eligible for the study (Polit & Beck, 2018:552). The following inclusion criteria were applied in this investigation. The participants had to be:

- Students enrolled at the chosen university nursing schools.
- Student nurses in their final year of study in the four-year degree program
- Participants between the ages of 21 to 35 years.

Exclusion Criteria

Exclusion sampling criteria are characteristics that can cause a participant to be eliminated from the target population (Burns & Groove, 2017: 518). For this study, the following students were excluded:

- Student nurses who were not enrolled at the chosen university nursing schools.
- Post-graduate students. Students who were above the age of 35 years. These were believed to have different life experiences and learning exposures. Hence, the researcher excluded them to reduce variability that may complicate analysis
- Students in lower levels of training were also excluded due to a lack of experience with SDL.

3.5.2.2 Sample Size

According to Brink et al. (2018: 128), sample size refers to the number of people who participate in the study. The researcher initially projected ten participants from each university school as the sample size, but in qualitative studies, the sample size is determined by data saturation. According to Polit and Beck (2018:306), data saturation is a guiding principle that involves sampling to the point at which no new information is obtained and redundancy is achieved. Data saturation was reached after interviewing 5 participants from each university nursing school. In this study, a sample size of twenty final-year students in their fourth year of study was selected from two university nursing schools, ten participants from each university nursing school.

3.5.3 Data Collection

The formal processes researchers use to guide data gathering in a standardised manner that enables the researcher to answer stated research questions, test the hypothesis, and evaluate outcomes are known as data-collection methods (Nwankwo & Obiakor, 2022:141). Data collection in this study was done using semi-structured interviews.

3.5.3.1 Semi-Structured Interviews

Semi-structured interviews are a qualitative research method where the researcher uses an interview guide with a set of predetermined questions but can ask follow-up questions to explore the topic in depth (Polit & Beck, 2018: 207). Semi-structured interviews allow standardisation and flexibility, wherein the researcher can follow up with probing questions on the participant's responses (Mash & Eze, 2022:126). An interview guide comprising three broad questions was used to elicit the views and opinions of student nurses. Further probing and clarity-seeking questions were used. Brink et al. (2018: 144) assert that follow-

up probing increases details in exploration, allowing the participants time to elaborate on the topic while the researcher gets an opportunity to clarify.

According to Creswell and Cresswell (2018: 302), qualitative interviews often involve one-on-one discussions between the researcher and the participant. They can be conducted in person, over the phone, or via video conferencing. In this study, interviews were conducted one-on-one in person between the researcher and the participants. Open-ended questions were used to let the participants express their experiences and viewpoints in their own words.

The researchers chose to use semi-structured interviews because they aligned with this study. They consist of a collection of open-ended questions that can be asked in any sequence. Unlike structured interviews, which comprise a set of predetermined questions that are asked in a specific order, semi-structured interviews offer a more natural discussion between the researcher and the participant (Polit & Beck 2018: 297). The researcher saw the advantage of using this tool since it offered in-depth knowledge about participants' viewpoints, experiences, and behaviours (Burns & Groove 2018: 414). Fourth-year students were selected purposively until data saturation was reached.

3.5.3.2 Piloting

A pilot study explores a research method or technique already in the researcher's mind to determine how well it will work in practice (de Klerk & van-Wyk 2022:135). This helps identify potential issues before proceeding with the whole-scale data collection. It also ensures that the main study runs smoothly and produces reliable results (Polit & Beck 2018:561). According to Burns and Groove (2018:109), this process involves using the research instrument for a minimal number of participants from the population group who will not form part of the sample. Burns and Groove (2018:793) further state that researchers may modify data collection tools and methods based on a few participants' pilot tests and feedback to ensure the study's feasibility, validity, and reliability.

The Dean of Students from each university nursing school approached two willing participants who met the selected criteria. They were given an invitation letter a week before, and the researcher made a phone call a day before. They were not part of the study sample but were only used to test the interview guide’s effectiveness. A digital

recorder was used during the interviews. The interviews lasted between 40 to 45 minutes. The data which was obtained helped the researcher to check if questions were clear, relevant and in logical order, evaluate the setting, recording equipment and timing. Pilot data was analysed to gain early insights. The tool did not indicate any necessary amendments, and the interviews were conducted successfully. The researcher had an opportunity to learn to use the digital recorder.

An introductory session to begin the process covered a brief overview of the study's purpose, ethical considerations, informed consent, and permission to record. The researcher made a closing statement at the end of each session.

3.5.3.3 Recruitment of the participants

This is the process of identifying and contacting individuals who meet the criteria to participate in the study (Brink et al.2018:117). The participants were recruited via their respective nursing education institutions. The researcher visited the university nursing schools and met with willing participants during their lunch hour after obtaining permission from the Dean of Student Affairs. The nursing students who volunteered to participate in the study were contacted via the student representatives. They were requested to participate through a letter of invitation, which clearly stated that there were no material or financial gains to be derived from their participation in this study. The same was also specified in the consent form. Purposive face-to-face recruitment was done. Final-year students referred by student representatives were recruited, and the researcher asked for their contact details to meet them so they could sign the consent forms and arrange the most convenient time for each participant to do the interviews.

The researcher promised that all information given to her would be kept confidential. Confidentiality is a pledge that any information participants provide will not be publicly reported in a manner that identifies them and will not be made accessible to others (Polit & Beck, 2018:140). Five students from the University Nursing School 1 declined to participate in the study, stating they were uncomfortable speaking in English and preferred their mother tongue. Two students from the University Nursing School 2 reported having busy schedules. However, enrollment of participants continued until the researcher managed to get 10 participants from each university nursing school.

Those who volunteered to participate were given informed consent forms to sign. Informed consent gives participants the information needed to make a reasonable decision about participating (Okeke, Omodan & Dube 2022:171). Each participant was assigned a unique code to protect their identity. Participants were recruited till data saturation was reached.

3.5.3.4 Conducting Interviews

The researcher visited the university nursing schools for one-on-one face-to-face interviews. Before the interviews, the researcher chose the right place for the interview, tested her audio recorder, and ensured that the participant was at ease through an icebreaker. Permission to conduct research was asked again. Burns and Groove (2018:628) advise the researcher to ask for permission even if it was already granted before the interview began.

The written informed consent form was read aloud, and the participants had opportunities to ask questions. They were informed that they were free to withdraw from participation at any time with no consequences and that they were not required to give their names to the researcher. During the interview, efforts were made to create a welcoming and non-threatening environment.

Data were collected through semi-structured interviews. An interview guide with three broad questions was used. The interview procedure included an introduction, topic questions and probes, and closing statements. Some gaps between the questions allowed the interviewer to write quick quotations and notes in case the audio recorder broke down. Semi-structured data was captured on voice recording devices and handwritten notes. Even when the interview is recorded, the researchers still take notes if the recording device malfunctions (Cresswell & Cresswell 2018: 305). Interviews lasted between 40 and 45 minutes, depending on the participants' responsiveness; some participants provided brief answers, while others elaborated. Data was collected over two months because the students were busy and had different schedules. Interviews were conducted until data saturation was achieved. After the 5th interview at each school, no new information emerged, and themes became repetitive. Five additional interviews were conducted at each school to confirm saturation.

According to Brink et al. (2018:144), although some standard open-ended questions cover specific topics or concerns in the research, there is also flexibility in investigating other relevant areas. In this study, the researcher had predetermined questions but had to allow the interview to evolve as guided by the conversation during which the respondent asked for more explanation and clarity.

3.5.3.5 Field notes

Field notes are detailed descriptive records made by researchers during or immediately after their observation in the field (Polit & Beck 2018:301). Field notes were taken to supplement interview data. The researcher recorded participants' behaviours observed during data collection, including the researcher's thoughts and interpretation of the observed behaviour. According to Burns and Groove (2018: 410), field notes may include content, metacommunication, and context, as well as the researcher's reactions and immediate responses. The field notes provided a better understanding of the data during analysis.

3.5.4 Data Analysis

Creswell & Creswell (2018:309) state that qualitative data analysis is the process of evaluating and interpreting qualitative data to make meaningful judgments about the topic under study. Coding, classifying, and synthesising data are some of the procedures in qualitative data analysis. Transcription refers to the process of converting spoken language from audio recordings into written text (Leavy 2017:150). The interviews were transcribed with the assistance of computer software. The researcher had prolonged engagement with transcripts to get a sense of the data before analysis by reading and rereading.

3.5.4.1 Data Management and Analysis

Data may be used for other purposes, such as a research report, journal articles and/or conference proceedings. However, for such purposes, the participant's identity remains protected.

Hard copies of answers will be stored by the researcher for a minimum period of five years in a locked cupboard/filing cabinet for future research or academic purposes; electronic

information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable.

Thematic content analysis was utilised in this study. It is a method for finding, examining, and reporting patterns (themes) in qualitative data (Creswell & Creswell 2018:308).

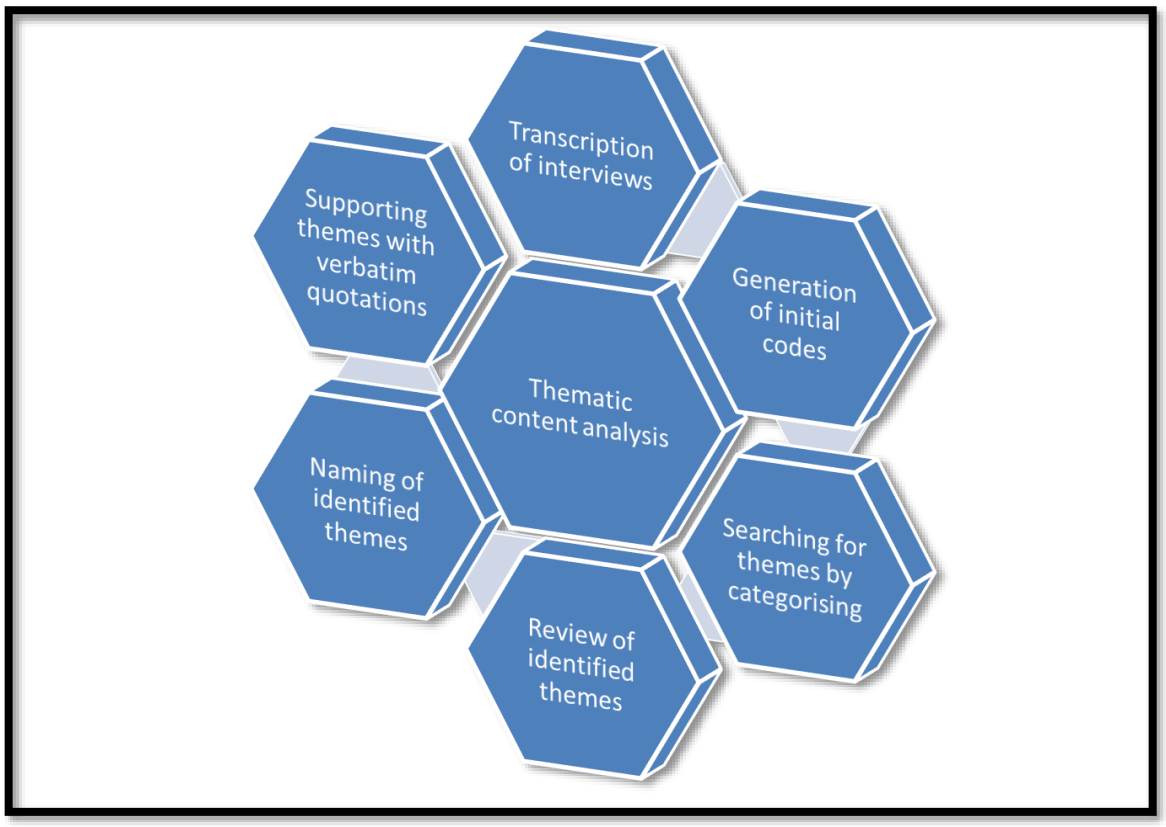


Fig 3.1: Six Steps of Thematic Content Analysis According to Creswell and Creswell (2018)

Thematic content analysis was used to analyse the data with the assistance of NVivo 14 software. This method allowed for the identification of recurring patterns and themes relevant to participants' perceptions following Creswell and Creswell (2018:308). All interview transcripts were imported into the software for systematic data management. The analysis began with familiarisation, followed by open coding, where relevant segments were labelled using NVivo's node system. The software facilitated the organisation of codes and helped in visualising patterns across the dataset. Codes were then grouped into potential themes, which were continually reviewed and refined to ensure they represent the data. Although the software supported the organisation and

retrieval of data, theme development and interpretation were carried out by the researcher based on the study's objectives,

To enhance the trustworthiness of findings, peer debriefing and member checking were employed. An audit trail of the coding process was maintained with the software.

3.6 TRUSTWORTHINESS

Several actions may be made to improve the trustworthiness of data in qualitative research. These include:

3.6.1 Credibility.

Credibility is the degree to which the data correctly represents the participants' reality. Techniques like extended interaction with the data, member verification, and negative case analysis can improve (Polit & Beck, 2018:415). The interviewer will check the data gathered and the conclusions reached by the participants to ensure the interpretations are correct and the data is valid. To gain a thorough grasp of the phenomena being investigated, prolonged engagement with the data and spending much time with the participants in the environment was done. The researcher also discussed the research process with experienced researchers.

3.6.2 Transferability

The degree to which the findings may be used and generalised in different contexts or situations is known as transferability (Polit & Beck 2018:416). The researcher gave readers enough descriptive information to assess how well the data applies to various contexts. In this study, the researcher used thick descriptions to present the results of the present study in ways that made them applicable to similar contexts.

The reader has access to sufficient details about the study's environment and participants to decide whether the results are relevant to their circumstances. By understanding the limitations, the reader can better appreciate how much the results can be applied to different contexts or groups.

3.6.3 Dependability

Dependability refers to the extent to which another researcher could replicate the study. Dependability in qualitative research entails the stability of results over time (Lincoln & Guba, 1985, cited in Polit & Beck, 2018:416). In this study, dependability was ensured by reporting the process within the study in detail, which enabled future researchers to repeat the work and obtain similar results. The researcher provided a detailed description of the research methodology, research context, and participants. The interview guide was given to an expert in qualitative research to interrogate it before it was fine-tuned for final use. Dependability was also enhanced by keeping a detailed research log and using a systematic data collection and analysis approach.

A detailed research log records the researcher's choices and actions throughout the study. This makes it more likely that another researcher could replicate the study. A methodical technique for gathering and analysing data guarantees that the results are not the result of chance or the researcher's prejudices (Brink, Van der Walt & Van Rensburg, 2018:159).

3.6.4 Confirmability

Confirmability refers to the extent to which the study's findings are not due to the researcher's biases. Confirmability is the potential for congruence between two or more independent people about data's accuracy or meaning (Polit & Beck 2018:416). Confirmability was achieved through peer scrutiny of the research process. Some peers who are experts in qualitative research were requested to scrutinise and provide advice on the research. Confirmability was also enhanced by using multiple data collection methods and involving numerous researchers in the data analysis.

Brink, Van der Walt, and Van Rensburg (2018:159) suggest using various data-gathering techniques (including observations, interviews, and document analysis) to minimise researcher bias and ensure that a wide range of sources of evidence supports the conclusions. By taking these measures, the researcher has the confidence that readers can have in the accuracy and reliability of their findings.

3.7 ETHICAL CONSIDERATIONS

Ethics is a system of moral values that is concerned with the degree to which research procedures adhere to professional, legal, and social obligations to study participants (Polit & Beck 2018:548). The following ethical issues were observed: informed consent, anonymity, confidentiality, privacy, and the principles of beneficence and maleficence.

3.7.1 Research permission

Before data collection, the researcher obtained ethical clearance from the UNISA College Research Ethical Committee (CREC), as shown in Annexure A. The researcher also sought permission from the Eswatini Human Research Board to conduct the study, and permission was granted, as shown in Annexure B. Furthermore, permission was sought and obtained from the managers of the two institutions in which the study was carried out, as shown in Annexures E and G.

3.7.2 Informed consent

Informed consent is an essential component of research ethics as it ensures that participants engage in a research activity voluntarily, fully understand the conditions of their participation, and provide explicit agreement to participate. According to Polit and Beck (2018:552), informed consent is a process in the ethical conduct of a study that involves obtaining people's voluntary participation in the study after informing them of possible risks and benefits. The researcher used the designed informed consent form attached in Annexure 6 for participants. Participants signed an agreement to participate in the study with no conditions tied to their participation.

Participants participated freely without intimidation and could withdraw from the study at any stage. Possible risks in this study included physical discomfort, fatigue or boredom, discomfort with strangers, and loss of time. These risks were overcome by obtaining informed consent. Informed consent means the participants had adequate information about the study, comprehended the information, and had the choice to consent or decline participation. After data collection, debriefing sessions were offered so participants could ask questions and share their concerns. The researcher also shared research findings with participants (Polit & Beck 2018:141). No participant showed any

distress that warranted the researcher to assist them in seeking medical attention.

3.7.3 Anonymity and confidentiality

This protects participants' identities, so data provided to them cannot be linked to them (Polit & Beck 2018: 537). The researcher wrote the participants' codes on the interview guide, and responses were kept confidential, which means all data gathered remained private.

3.7.4 Justice

Justice refers to the participants' rights to fair selection and treatment (Polit & Beck 2018:141). The researcher selected study participants for reasons related to the research problem (Brink et al. 2018:30). The principle of fairness was applied using the study's inclusion criteria to recruit participants. Participants were informed that participation was voluntary and they could withdraw from the study without penalties.

3.7.5 The principles of beneficence and maleficence

The principle of beneficence means the researcher needs to safeguard the well-being of research participants who have the right to protection from discomfort and harm; harm may be physical, emotional, spiritual, economic or legal (Brink et al. 2018:29). If there is potential harm the research would be abandoned to allow harm intervention. The principle of beneficence also gives participants the right to protection from exploitation. Participants were assured that their information would not be used against them. The researcher ensured that harm to participants was reduced by carefully structuring the questions and monitoring participants for signs of distress.

3.8 CONCLUSION

The theoretical framework, which covers participant selection, data collection techniques, and data analysis, was covered. All final-year nursing students at two selected nursing schools who matched the eligibility requirements and who were willing to participate were chosen by a purposive sampling technique. The data-gathering method employed in this study was semi-structured interviews using an open-ended questioning approach. Interviews began with some pre-planned questions based on the

anticipated outcomes.

CHAPTER FOUR

PRESENTATION, ANALYSIS, AND DESCRIPTION OF THE STUDY FINDINGS

4.1 INTRODUCTION

This chapter analyses the study findings from the individual, face-to-face, and semi-structured interviews conducted by the researcher. It further presents participants' perceptions of self-directed learning approaches in selected nursing schools in Eswatini based on the questions in the interview guide. The findings are presented according to themes and further broken down into sub-themes. The major data sets of this study were gathered from two University Nursing Schools in Eswatini. The data were solicited from student nurses using individual interviews.

The following objectives guided the study:

i. To explore student nurses' viewpoints regarding the use of SDL during their training

ii. To describe student learning approaches to enhance self-directed learning in selected schools.

iii. To determine barriers to using self-directed learning in selected nursing schools.

4. 2 **Data Analysis**

The analysis of qualitative data from semi-structured audio-recorded interviews was done following the steps of Cresswell and Cresswell (2018:309) analysis process as detailed in the previous chapter (Refer to Section 3.5.4). Following extensive reading and re-reading of the transcribed audio-recordings of the participants' responses, several themes and sub-themes emerged from the data. These are presented in a table format, indicating the themes and sub-themes which will precede the discussion of each theme's categories. The discussion will be supported by excerpts from the verbatim interview quotes of participants.

4.2.1 Demographic Profile of Study Participants

A total of 20 university nursing school students were interviewed: 10 from University Nursing School A and 10 from University Nursing School B. One was a government-run public university where students received study grants; the other was a privately owned and run University Nursing School where students were self-funded. The age range of participants was between 21 and 34 years.

TABLE 4.1: Demographic characteristics of study participants

CHARACTERISTIC	NUMBER OF PARTICIPANTS	
AGES:	Frequency	Percentage
21- 23	8	40%
24-26	6	35%
28-34	7	25%
GENDER:		
Female	12	60%
Male	8	40%
Marital Status:		
Married	3	15%
Single	17	85%
Total	20	100%

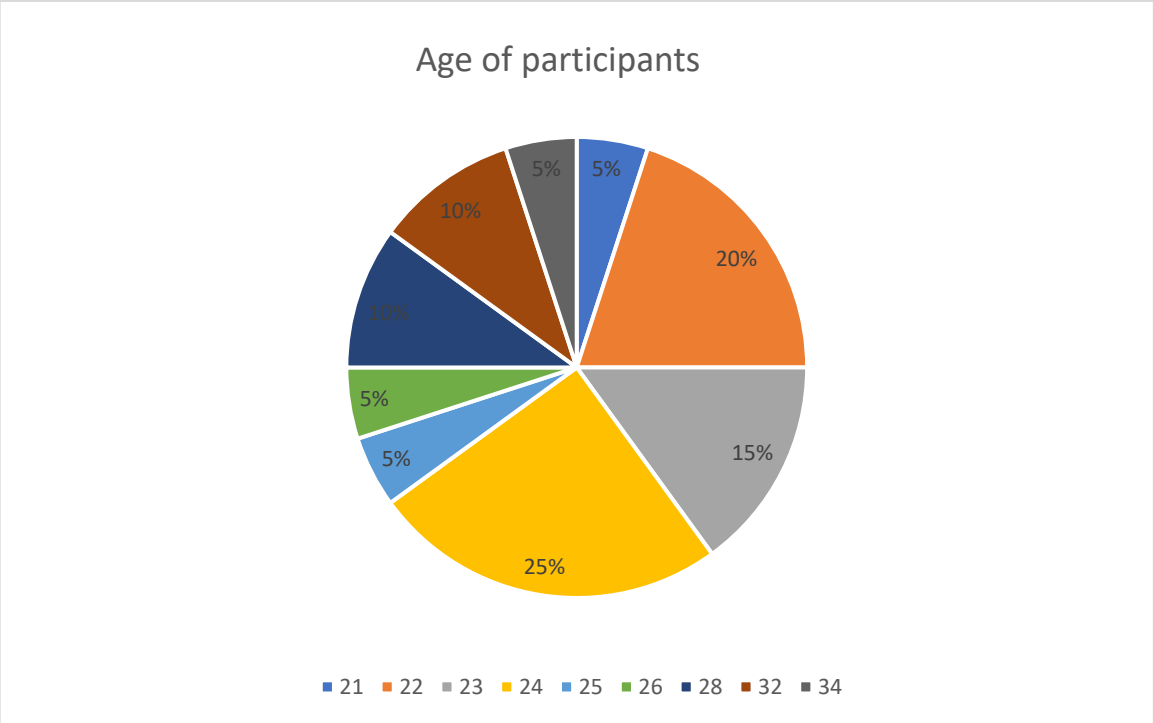


Figure 4.1. Age of participants in percentage

4.2.1.1 Age Range of Participants

Table 4.1 indicates that the oldest participant was 34 years old, and the youngest was 21. Participants from university school A had an age range between 22 and 28 years. The age range of participants from University Nursing School B was between 21 and 34 years. University Nursing School B had older students. The study interviewed participants between 21 and 34 years old, undergraduates in their fourth year of study**.** Forty per cent of the participants were between 21 to 23 years, 35 per cent were between 24 to 26 years, and 25 per cent were between 28 to 32 years.

4.2.1.2 Gender

From University Nursing School A, 7 male students and 3 female students were inteviewed. It was noted that male students were more comfortable sharing information in English, while female students were shy and often lacked confidence. All 7 male students specialised in mental health, and female students specialised in midwifery. From University Nursing School B, 9 female students and 1 male student were interviewed. Three female

students and one male student specialised in mental health, while six female students specialised in midwifery.

4.2.1.3 Marital Status

Only 3 females from University Nursing School B were married, the rest were single. The married women stayed out of campus and did not have time to study independently because they had multiple roles. Participants from University Nursing School A were all single.

4.3 STUDY FINDINGS

Student nurses' perceptions of self-directed learning approaches in selected university nursing schools in Eswatini were analysed and categorised into three themes and six sub-themes, as shown in Table 4.2. Data saturation was reached after interviewing five participants, but the researcher continued with the interviews, anticipating getting new views to yield clear themes (regularly recurring in the qualitative data) (Polit & Beck 2018:572).

TABLE 4.2 THEMES AND SUB-THEMES

THEMES	SUB-THEMES	CATEGORIES
1. Taking a lead in one's learning	1.1 Broadening the scope of learning,	a) Students' initiatives in learning b) Being in charge of one's own learning c) Sense of independence
	1.2 Therapeutic learning environment	a) Non-reliance on lecturer/self-driven learning. b) Learning and discovering information on your own.
	1.3 Gaining presentation skills	a) Deeper understanding and knowledge of the subject matter b) Boosting confidence in-class participation

2. Learning approaches to enhance self-directed learning	2.1 Work Assignments	a) Questioning and discussions. b) Individual and group assignments c) Use of group assignments to facilitate peer teaching. d) Opportunities for feedback on group assignments.
3. Barriers to effective self-directed learning	a. Individual	a) Sufficient time is available for preparation, but individual preferences vary. b) Underutilisation of libraries and study facilities. c) Students often study only during exam periods. d) Heavy reliance on tutors/lecturers/spoon-fed. e) Lack of guidance from lecturers

		f) Time management g) Lack of confidence in using English for academic purposes
	b. Institutional barriers	a) Resources such as books and research materials are not available. b) Internet facilities are not available, the timer c) Long hours of classroom teaching. d) Teaching and learning preferences

4.3.1. Theme 1: Taking a lead in one's learning

Many participants noted the importance of taking a lead in their own learning, indicating that SDL broadens their scope of learning, creates a therapeutic learning environment, and helps them gain presentation skills, independence, critical thinking, and better knowledge retention.

TABLE 4.3: THEME 1: TAKING A LEAD IN ONE'S LEARNING

Theme	Sub-themes	Categories
1 Taking a lead in one's learning	1.1 Broadening the scope of learning	a) Students' initiative to learning b) Being in charge of own learning c) Sense of independence
	1.2 therapeutic learning environment	a) Non-reliance on lecturer/ self-driven learning

		b) Learning and discovering information at your own pace
	1.3 Gaining presentation skills and learning skills.	a) Deeper understanding and knowledge of the subject matter
		b) Boosting confidence in-class participation

Sub-theme 1.1 Broadening the scope of learning

a. Students' initiative in learning

The interviews with the participants made it clear that their perceptions of self-directed learning were more inclined to the active role the student takes in learning than expecting everything from the tutor. The responses highlighted participants' perceptions of self-directed learning. The following quotes support the findings:

> *"To me, it is more of taking the lead in learning without expecting the lecturer to spoon-feed me. Even when we are given notes on a topic, I have to add my own notes from my own reading"* (Participant 7: University nursing school B)**.**

> *"self-directed learning triggers more interest... broadens your scope of learning"* (Participant 9: University Nursing School A).

b. Being in charge of learning

Students generally perceived self-directed learning as taking responsibility for their learning without relying solely on tutors or lecturers. They saw it as a process where the lecturer provides a framework or "skeleton," and the student needs to provide the "flesh" or details through independent research. The excerpts below confirm this:

> "*When you are taking up the information yourself, you learn it more.*" (Participant 3: University Nursing School B).

"*Once a course outline is issued to us by the lecturer, it means we are now aware of what we have to learn in the course, and we will go out to look for the information*" *(*Participant 2*:* University Nursing School A)

c. Sense of independence

Students appreciate autonomy but require guidance to initiate self-directed learning. The sense of control helps them take responsibility for their progress and fosters a stronger commitment to their education. Autonomy in SDL allows students to learn at their own pace, revisit challenging content, and seek knowledge based on their needs, which builds confidence and improves clinical decision-making. The following responses support this finding:

"*I think that it teaches you to be independent, and you can even read ahead, not wait for the lecturer*" (Participant 7: University Nursing School B).

"*I think being in charge of my own learning means I need to research for myself… I am literally not doing this thing for my lecturer but for my own understanding*" (Participant 7: University Nursing School A).

Sub-theme 1.2 Therapeutic learning environment.

a) Non-reliance on lecturer/ self-driven learning

Participants expressed concern about over-reliance on lecturers. They suggested that SDL create a conducive learning environment. Students believe that they should not passively wait for tutors but take charge of their learning. They want to plan and manage their study time without reminders. The following were some of the responses:

"*It facilitates a therapeutic learning environment for the student*." (Participant 1: University Nursing School A*).*

"*Because relying on tutors largely is wrong, there won't be much that you will get because I feel like education has to be self-driven, so the tutors should not push us around, but we should be the ones who are eager to learn*." *(*Participant 1: University Nursing School B*).*

b) Learning and discovering information at your own pace

Responses revealed that some participants could learn on their own, students identify what they need to learn and set their own learning objectives based on interest or gaps in knowledge. The following excerpts confirm this:

"*an approach that's more reliant on the students themselves teaching themselves, digging up for the information, going out there into the libraries and on the internet*"(Participant 9: University Nursing School A).

"It is all about being actively involved in the learning process as a student." (Participant 6: University Nursing School B).

Sub-theme 1.3 Gaining presentation and learning skills

a) Deeper understanding and knowledge of the subject matter

Participants acknowledged that SDL could enhance their learning, helping them gain deeper knowledge and skills on topics that matter at their own time. These were some of their responses:

"*You benefit a lot because when you have studied or got more information, you understand it even more, and it takes time to come out of your mind"* (Participant 9: University Nursing School A).

"*Even when we are given notes on a topic, I have to add my notes from my own reading*." (Participant 7: University Nursing School B*).*

b) Boosting confidence in class participation.

SDL encourages students to actively research, practice, and revise, which strengthens their knowledge base, and students feel more competent to contribute meaningfully in class. This is revealed in the following responses:

> "*It equips us with the presentation skills and learning* skills." (Participant 3: University Nursing School B).

4.3.2 Theme 2: Learning Approaches to Enhance Self-Directed Learning

Group work is a common method for facilitating SDL. Students frequently collaborate on group presentations, which helps them learn from each other. However, some students feel that this is insufficient and that more individual research and leadership opportunities should be offered.

TABLE 4.4. **LEARNING APPROACHES TO ENHANCE SELF-DIRECTED LEARNING.**

THEME	SUB-THEME	CATEGORIES
2. Learning approaches to enhance self-directed learning	2.1 Work Assignments	a) Questioning and discussions. b) Individual and group assignments/ Research c) Using group assignments to facilitate peer teaching d) Opportunities for feedback on group assignments.

Sub-theme 2.1 Work Assignments

a) Involved through questioning and discussions.

Participants revealed that they were involved in learning through questioning and group presentations. Student nurses engage in group projects, case studies, and class discussions where they learn from peers and practice communication and collaboration skills. These are some of the responses from the interviews:

> "*After the presentation, the lecturer will always ask how you think you did?*" (Participant 5: University Nursing School A).
> "*We sometimes work in groups of five or six but a maximum of ten, and we choose our group presenter even two*" (Participant 5: University Nursing School B).

b) Individual and group assignments

Participants prepared for lessons through group work or individual research. They stated that they study the topic with peers before the lecture to exchange ideas and identify gaps in understanding. The following quotes support this finding:

> "*Usually, it's in the form of an assignment that you have to present*." (Participant 3: University Nursing School B).

> "*This is done through a group assignment whereby they will give us an assignment*." (Participant 3: University Nursing School A).

c) Use of group assignments to facilitate peer teaching.

Peer-to-peer learning emerged as a valuable strategy for consolidating knowledge, particularly during group presentations and discussions. Peer teaching was done through group assignments. The following responses support this finding:

> "*We engage in group discussions without our tutors, with our peers*" (Participant 4: University Nursing School B).

"*Every topic has an activity where we meet in small groups and discuss what we have learnt*" (Participant 2: University Nursing School A).

d) Opportunities for feedback on group assignments.

Group work and peer presentations enhance understanding through shared learning. Working together allows students to identify gaps in knowledge and correct them as a team. Feedback is often continuous and constructive, improving learning outcomes. The following responses support this:

"*We study together, help each other, and teach each other during group discussions*" (Participant 7: University Nursing School B).

"*I think during presentations, we will be just teaching each other because the lecturer just gives us the topic and then he/she sit down and watch us engaging in the particular activity. Then there are questions that each group ask the group to see if they understood.*" (Participant 2: University Nursing School A).

4.3.3 Theme 3: Barriers to Effective Self-Directed Learning

Several barriers were noted, including a lack of resources, insufficient internet access, and limited engagement with study materials outside the classroom. Participants pointed out that although self-directed learning fosters deeper learning, it requires resources and time that are sometimes lacking.

TABLE 4.5: BARRIERS TO EFFECTIVE SELF-DIRECTED LEARNING

THEME	SUB-THEME	CATEGORIES
3. Barriers to effective self-directed learning	3.1 Individual	a) Individual preferences vary. b) Underutilisation of libraries and study facilities. c) Students often study only during exam periods. d) Heavy reliance on tutors/ spoon-fed

	e) Lack of guidance from lecturers
	f) Time management
	g) Lack of confidence in using English for academic purposes.
3.2 Institutional barriers	a) Resources such as books and research materials are not available.
	b) Internet facilities are available but not available at times.
	c) Long hours of classroom teaching
	d) Teaching and learning preferences

Sub-theme 3.1 1 Individual Barriers

a) Individual preferences vary.

Some participants revealed that time was available, but individual preferences varied. It was noted that participants utilised their time differently after lecture hours. The following quotes supported this:

> *"There is a lot that happens; others go to clubs, as for me, I am always on my phone, on TikTok, Facebook and Instagram; others go to church, there is a lot really*" (Participant 2: University Nursing School B).

> "*I study with my friends and classmates after school, even on weekends. It was very effective for me. I got the grades that I really wanted, and I have improved even more*" (Participant 7: University Nursing School B).

b) Underutilisation of libraries and study facilities.

It was noted that students were not fully aware of available resources. The facilities have unreliable internet and are far from residence, which discourages students from using them. The following responses support this finding:

> "*Students don't know what is available because we don't usually seek*" (Participant 1: University Nursing School A).

> "*Internet facilities are available but may be used for non-academic purposes*" (Participant 3: University Nursing School B).

c) Students often study only during exam periods.

The majority of students revealed that they studied during the examination period. Students feel pressure to study and prepare during examination time, so they seek quiet and focused environments like libraries. Libraries are not used regularly because of poor awareness of the library's full range of services, such as research help, databases. Below are some of their responses:

> "*We only utilise them during exam time*" (Participant 5: University Nursing School A).

> "*When you want to study for exams, that is when we use the library*" (Participant 9: University Nursing School B).

d) Heavy reliance on tutors/ spoon-fed

Participants frequently described their lecturers as guides who should provide direction rather than spoon-feed them, allowing students to develop their research and critical thinking skills. Students viewed lecturers as facilitators who should offer guidance rather than be the sole source of information. The following responses support this:

> "*We sometimes become a stereotype, as we focus on what they've given us instead of getting to know more information*" (Participant 10: University Nursing School A).

"*Students will be lazy if they rely on tutors*" (Participant 3: University Nursing School A)

e) Lack of guidance from lecturers

There was consensus that lecturers should facilitate rather than spoon-feed students without clarification. Lecturers were expected to provide guidance and clarification but leave room for students to search for information independently. The following quotes support this:

"*Usually, most lecturers just come and project their slides on a topic. They give a few notes without clarifications on the slides, so you just have to take notes here and there whilst in class, and then you go and read further on that."* (Participant 3: University Nursing School A*).*

"*I don't think we have the necessary skills to study on our own, for instance, when I am given an assignment, it becomes difficult to use the keywords."* (Participant 3: University Nursing School B).

f) Time management

Participants expressed that time management, workload, and stress were significant barriers to effective SDL. Time constraints and heavy workloads prevented students from fully engaging in SDL.

"*The workload is too much, and we don't have enough time for SDL*" (Participant 5: University Nursing School B).

"*It's always packed. We are in class from Monday to Friday, and you find that you have an assignment for every other class*." (Participant 6: University Nursing School A).

g) **Lack of confidence in using English for academic purposes**.

Most respondents said they were not comfortable sharing information in English. Students only use English in the lecture room, and without regular speaking practice, fluency and confidence remain low. They fear making mistakes in sentence structure. These were some of their responses:

> "*They are not confident. They prefer to use their mother language, Siswati*" (Participant 1: University Nursing School A).

> "*When you try to put it in Siswati, it comes out differently*" (Participant 1: University Nursing School B).

> "*English. I don't think we are confident when it comes to that. Okay. Also, we have different individuals in the class. So, there are those willing to share and those who keep to themselves*" (Participant 2: University Nursing School B).

Sub-theme 3.2 Institutional barriers

a) Resources such as books and research materials are not available

A significant challenge identified by participants was the limited availability of resources such as textbooks. Many students relied on outdated editions of textbooks, which hampered their ability to conduct thorough research. The following quotes support this finding:

> "*We do not have many books… we try to find online books, but they are expensive*" (Participant 2: University Nursing School A).

> "*We just borrow prescribed books from the library for maybe two weeks at most*" (Participant 7:University Nursing School B).

b) Internet facilities are available, but not always available at times.

It was noted that insufficient internet access limited self-directed learning. There was limited access to research resources such as journals and databases, leading to inadequate study materials. Below are some of the responses from the interviews:

"*The internet is not reliable; sometimes it goes down for months*" (Participant 7: University Nursing School A).

"*Internet facilities are not in a good state right now*." (Participant 5: University Nursing School B).

c) Long hours of classroom teaching

Some participants revealed that long learning hours and heavy workloads were barriers to SDL, leading to stress. They revealed that they had limited time for independent study, and they prioritised mandatory tasks over optional SDL. After long hours, students are often too tired to focus on SDL. Fatigue reduces concentration, motivation, and the ability to reflect on what has been learned. Overloaded students feel overwhelmed. The following quotes support this finding:

"I *think the school hours are too long. I feel that for me to actually be effective in my schoolwork, I need to have time to rest and also have enough time to go through my books. So, you find that I'm at school from 8 to 4 every day. There is no time to rest because when I get home, I need to do schoolwork, and I need to do my chores"* (Participant 3: University Nursing School B).

"*The workload is too much, and we don't have enough time for SDL" (*Participant 5: University Nursing School A).

d) Teaching and learning preferences

Some participants revealed that they did not understand when some lecturers were teaching, and it depended on the lecturer and the approach used. Some lecturers rely on theory rather than practical examples, while some students learn better with visuals or hands-on practice, not just verbal lectures. These are some of their responses:

"*There are some lecturers, I can say it depends on the lecturers because some lecturers are good at teaching. They have the skill to engage the students. After all,*

when the test comes, it's impossible to remember anything that I've learned during the lecture. I have to be on my own" (Participant 4: University Nursing School A).

"*They don't teach us how to look for information on our own, they only give us the assignments that you try to find the information"* (Participant 5: University Nursing School B).

4.4 CONCLUSION

This chapter discussed the main research findings. The findings discussed were on nurses' views on using self-directed learning approaches, common teaching-learning approaches used to enhance self-directed learning, the benefits students derive from using self-directed learning approaches, and factors promoting or hindering the use of self-directed learning. The next chapter concludes the study and offers a discussion of the findings and recommendations.

CHAPTER FIVE

DISCUSSION OF THE STUDY FINDINGS WITH LITERATURE CONTROL, LIMITATIONS, RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

This chapter summarises the main findings. These findings directly relate to the research questions that guided the study and ultimately address its purpose and objectives. The study's purpose was to explore student nurses' perceptions of using self-directed learning approaches in selected nursing schools in Eswatini. The chapter summarises the main findings, draws conclusions, and provides recommendations to improve self-directed learning approaches. It also discusses limitations.

5.2 RESEARCH DESIGN AND METHOD

This study followed an exploratory, descriptive qualitative design. Chapter three describes this study's research design and method in detail. This design aimed to explore and discover issues about the phenomenon under study, in this case, self-directed learning in nurse training. It enabled the researcher to analyse participants' understanding of the phenomenon, with knowledge constructed from the participants' point of view (Burns & Grove 2017:66). The study sought answers to the following questions were sought:

i. What are the student nurses' viewpoints toward the use of self-directed learning?
ii. What are the learning approaches used to enhance self-directed learning?
iii. What are the barriers to student nurses using self-directed learning in selected nursing schools?

5.3 MAJOR FINDINGS OF THE STUDY

This section discusses the main research findings on student nurses' perceptions of self-directed learning approaches in selected university nursing schools in Eswatini. These findings were:

1. taking a lead in one's learning,
2. learning approaches to enhance self-directed learning and
3. barriers to effective self-directed learning.

5.3.1 Taking a lead in one's learning.

The study found that the participants saw the need for, and importance of, students' taking initiative in their learning. This showed that SDL broadens the scope of learning, creates a therapeutic learning environment, develops presentation skills, fosters independence and critical thinking, and facilitates better knowledge retention. According to Kavousi, Miller and Alexander (2020:713), self-directed learning is the student's ability to manage learning and resources, show independence, and think critically and systematically when solving challenges. It was clear that perceptions of self-directed learning were more inclined to the student's active role in learning, contrary to expecting all from the tutor. Students generally perceived self-directed learning as taking responsibility for their learning without relying solely on tutors or lecturers. This aligns with Wongsasung, Satityudhakarn, Takan and Nutong's (2018:41) conclusion that SDL assists in developing social, cooperative, cognitive, and constructive interpersonal abilities.

According to Lee, Song and Hong (2018:8), students who take the initiative in their learning process exhibit higher levels of engagement and academic accomplishment. This finding supports the present study findings. According to the researchers' findings, encouraging student autonomy can result in more successful learning results. A study by De Clercq, Galand, Hospel and Frenay (2021:11) on SDL readiness also shows that students actively seek learning opportunities to improve their critical thinking and problem-solving capabilities. The study also found a correlation between greater academic enthusiasm and satisfaction and this kind of initiative. In a similar vein, a study by Broadbent, Panadero, Lodge, Fuller-Tyszkiewicz (2023:136) examined the influence of self-regulated learning strategies on academic performance and discovered that students who proactively oversee their learning process, establish objectives, and track their progress have a higher chance of academic success. They examined the function of self-regulation in online

learning environments. Broadbent, Panadero, Lodge, and Fuller-Tyszkiewicz (2023:136) noted that students who are proactive in their learning, that is, who establish objectives for themselves and ask for feedback—perform better in online courses than those who are reactive.

In this study, some participants revealed little experience with self-directed learning (SDL). However, they generally perceived SDL as taking responsibility for their learning without relying solely on tutors or lecturers. Participants saw SDL as a process where the lecturer provides a framework. However, they required guidance to initiate SDL despite appreciating autonomy. The result aligns with a study by Alharbi (2018: 234), which discovered that many nursing students reported having little exposure to SDL in their curricula. According to the research, students' exposure to SDL approaches varied depending on how frequently they were incorporated into the coursework, not just how they were introduced. In this study, SDL was implemented in university nursing schools; it was noted that uneven application led to little exposure. Some students in these schools reported encountering SDL regularly, while others occasionally encountered it.

5.3.2 Learning approaches used to enhance self-directed learning.

Participants revealed that they were involved in learning through questioning and group presentations. It was noted that participants prepared for lessons through group work or individual research. Group work and peer presentations enhanced understanding through shared learning. Peer-to-peer learning emerged as a valuable strategy for consolidating knowledge, particularly during group presentations and discussions. Peer teaching was done through group assignments.

The current study noted that student engagement and comprehension are greatly increased when students actively participate in the teaching and learning processes, such as through peer teaching and debates. Deeper comprehension and critical thinking are developed in interactive learning settings. Similarly, Boud and Dawson's (2021:165) study demonstrated that increased student satisfaction and better learning results from student involvement in the planning and execution of learning activities or tasks, such as peer feedback and cooperative projects. Students who actively participate develop a sense of accountability and ownership. Pietryka and Glazier (2022:14) concluded that students who actively participate in the teaching and learning process enjoyed learning material more

and felt that their contributions mattered to the lecturer. Group discussions and student-led seminars are examples of participatory teaching techniques that improve students' ability to communicate their ideas and work with others. According to research by Malecka, Bound and Carless (2020:12), academic performance and learning retention are enhanced when students participate in the learning process through formative assessment and feedback loops. The issue of students' active involvement in learning through varied approaches is confirmed in the present study as a common and useful approach in self-direct learning.

The results of previous research in the literature also support the present study's conclusion about students taking the lead. Topping (2018:2) found that in peer teaching, students help each other determine their strengths and weaknesses. Peer feedback is more readily available than lecturer feedback. When given topics to review beforehand, students participate more actively in class discussions and can better understand complex concepts during lectures.

5.3.3 Barriers to the use of self-directed learning approaches

This study revealed that constraints such as lack of motivation, poor time management, and institutional barriers like resource limitations, lack of internet connectivity, and student grants were key obstacles to successful self-directed learning. This aligns with the study by Xu and Jaggars (2021: 830), who concluded that low motivation, often due to external pressures or lack of interest in the subject matter, can significantly hinder SDL. Without intrinsic motivation, learners may struggle to take the initiative in their education.

Amemado (2020:45) states that a lack of access to necessary learning materials or tools, such as textbooks, internet access, or learning platforms, restricts a learner's ability to engage in SDL. Most participants revealed that they had limited internet access and books were unavailable. Most respondents revealed that they were overwhelmed by the workload. According to Kim and Park (2022:115), effective SDL requires learners to manage their time well. A lack of time management skills can lead to procrastination and inefficiency and ultimately hinder the self-regulation necessary for SDL.

Learners who lack confidence in their abilities or fear failure may avoid taking responsibility for their learning. This anxiety can prevent them from fully engaging in SDL (Pereira &

Almeida, 2023: 120). When learners are overwhelmed by too much information or complex tasks, it can lead to cognitive overload, hindering their ability to effectively engage in SDL (De Bruyckere & Kirschner, 2020: 760).

5.4 CONCLUSION.

The study revealed that nursing students generally understand self-directed learning as taking responsibility for their learning without relying solely on tutors or lecturers. They see it as a process where the lecturer provides a framework or "skeleton," and the student needs to seek out the "flesh" or details through independent research. Many students emphasised the importance of taking initiative in SDL, recognising that class time is insufficient to cover all the necessary material. They appreciate the opportunity to explore topics more deeply and fill knowledge gaps.

A significant challenge identified by students is the limited availability of resources such as textbooks and reliable internet. Many students rely on outdated editions of textbooks or slow internet connections, which hampers their ability to conduct thorough research. Students mentioned frequently feeling overwhelmed by their schedules, which include long hours in lectures, assignments, and practicals. This leaves little time for independent study, making it challenging to prepare for classes adequately.

Group work is a common method used to facilitate SDL. Students frequently collaborate in group presentations, which helps them learn from each other. However, some students felt this was insufficient and that more individual research and leadership opportunities should be offered. There are occasional opportunities for peer assessment; however, this practice is not widespread, and students desire more peer-led evaluation opportunities.

5.5 RECOMMENDATIONS

Based on the results, the researcher makes the following short-term and long-term recommendations:

5.5.1 Recommendations concerning the clinical practice/ teaching of nursing students.

Nursing students should:

- **Engage in regular reflection and self-assessment** by identifying their strengths and areas needing improvement. They should consistently use reflective journals to deepen their understanding and track progress.
- **Take ownership of their learning** by actively seeking out resources, asking insightful questions, and requesting feedback from educators and peers.
- **Approach assigned tasks and case studies with initiative**, conducting independent research and applying problem-solving skills to real-world scenarios.
- **Participate in peer learning** through group discussions, collaborative projects, and team-based problem-solving activities.
- **Respond constructively to feedback**, using it as a tool to overcome challenges and improve performance in self-directed learning tasks

5.5.2 Nursing practice

Nursing students should:

- **Pursue self-initiated learning opportunities**, such as attending workshops, engaging in independent study, and sharing newly acquired knowledge with peers.
- **Utilise available resources** like online learning platforms, digital libraries, and clinical guidelines to explore topics beyond the curriculum.
- **Seek mentorship from experienced nurses**, setting personal learning goals and welcoming guidance and feedback to support their growth and autonomy.

5.5.3 Nursing Education

In academic settings, **nursing students should**:

- **Make full use of study facilities**, especially those provided in residences, to create a conducive learning environment.
- **Take advantage of internet access and printed materials** to read widely and deepen their understanding of nursing concepts.

- **Engage with digital learning tools**, including e-learning platforms, simulation software, and mobile apps, to monitor their progress and access educational content independently.
- **Demonstrate initiative in independent learning**, knowing that such efforts are valued and may be formally recognised or rewarded by their institutions.

5.5.4 Further research

This study focused on student nurses' perceptions of self-directed learning approaches in selected nursing schools in Eswatini. Future studies on SDL can be done in the same country with other faculty students, such as environmental health students or education students. Comprehensive studies with the same population in other Sub-Saharan region countries would provide wider views on this critical area of inquiry. Other studies could explore policies that can enhance the professional development of student nurses during nurse training. Other researchers may also include nurse educators' views and those of mentors. Similar research could be conducted in hospitals that train nurses in the same country.

5.6 CONTRIBUTION OF THE STUDY

The contribution of the present study's findings is assessed in terms of promoting self-directed learning and disseminating research findings.

5.6.1 Promoting self-directed learning

- The current study contributes to the existing literature on self-directed learning.
- Policymakers will see the need to pay student grants to enable students to buy prescribed books and other materials.
- The findings will promote self-directed learning and facilitate students' transition to autonomous, competent, and effective professional practitioners who can provide safe and relevant nursing care

5.6.2 Dissemination of research findings

The study’s findings will be presented at research seminars and conferences, and articles will be published in accredited journals, both locally and abroad. This will ensure

the study findings' accessibility to a broader audience and contribution to the existing body of knowledge.

5.7 LIMITATIONS OF THE STUDY

The study was limited to voluntary respondents with an interest in the study.

The major limitation was that the study focused on a small number of student nurses. Therefore, this limited the generalisability of findings to the whole district and the province at large. However, the study will assist in identifying shortfalls in teaching strategies. The study targeted student nurses, leaving out the other stakeholders like the school governing body and educators.

5.8 CONCLUDING REMARKS

The study focused on student nurses' perceptions of self-directed learning approaches. The results demonstrated that students generally understand self-directed learning as taking responsibility for their learning without relying solely on tutors or lecturers. They saw it as a process where the lecturer provides a framework or "skeleton," and the student needs to seek out the "flesh" or details. However, there were many limitations, for example, the unavailability of books, internet, study facilities, financial problems, and some lecturers who spoon-fed them. The study succeeded in bringing to light insights on the conditions promoting and those hindering self-directed learning in nursing training and education.

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ANNEXURE A: Ethical Clearance UNISA

UNISA university of south africa

COLLEGE OF HUMAN SCIENCES RESEARCH ETHICS REVIEW COMMITTEE

24 May 2023

NHREC Registration # :
Rec-240816-052
CREC Reference # :
53291034_CREC_CHS_2023

Dear Mrs Tendai Maphosa

Decision:
Ethics Approval from 24 May 2023 to 24 May 2024

Researcher(s): Name: Mrs. T. Maphosa
Contact details: 53291034@mylife.unisa.ac.za
Supervisor(s): Name: Prof F. H. Mfidi
Contact details: mfidifh@unisa.ac.za

Title: Students' perceptions on the use of self-directed learning approaches in selected Eswatini nursing schools.

Degree Purpose: Masters

Thank you for the application for research ethics clearance by the Unisa College of Human Science Ethics Committee. Ethics approval is granted for one year.

The *medium risk application was reviewed by* College of Human Sciences Research Ethics Committee, in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the College Ethics Review Committee.
3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the

confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.

5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
7. No fieldwork activities may continue after the expiry date **(24 May 2024).** Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

*The reference number **53291034_CREC_CHS_2023** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Yours sincerely,

Signature: 

Prof. KB Khan
CHS Research Ethics Committee Chairperson
Email: khankb@unisa.ac.za
Tel: (012) 429 8210

Signature: PP

Prof ZZ Nkosi
Acting-Exécutive Dean: CHS
E-mail: nkosizz@unisa.ac.za
Tel: 012 429 6758

ANNEXURE B: LETTER SEEKING PERMISSION FROM DEPARTMENT OF HEALTH ESWATINI

REQUEST FOR PERMISSION TO CONDUCT THE STUDY

Request for permission to conduct research at the University of Eswatini, Faculty of General Nursing, and University of Nazarine Faculty of General Nursing.

Ms T Maphosa
House number 5 Manzini Street.
University of Eswatini
Kwaluseni Campus
Kwaluseni

11 October 2023.

The Chairperson
Department of Health, Eswatini
Research Ethics Committee

Dear Sir/Madam

I am Ms. Tendai Maphosa, currently registered for a Masters degree in nursing science at the University of South Africa under Professor Mfidi as my research supervisor. I am requesting permission to carry out my study at your Nursing Institutions, the study entitled "**Student Nurses' Perceptions of the Use of Self-directed Learning Approaches in Selected Eswatini Nursing Schools."**

The aim of the study is to explore student nurses' perceptions of the use of self-directed learning approaches in selected schools of nursing in Eswatini. This study is expected to collect important information that could assist in improving teaching and learning approaches in nurse education. The University of Eswatini has been selected to participate in the study because they are currently offering nurse training and education through the Bachelor of

Nursing Science program offered by the Faculty of Health Sciences. A total of twenty final-year students from each school will be requested to participate in the study.

The study will entail engaging students in a forty-minute semi-structured individual interview using an interview guide. The interview session shall be audio-recorded as per the participants' permission. All the information provided shall be treated with great confidentiality.

There is no obvious benefit for participating in this study, but the study findings will inform nurse educators on how students view the use and benefit of self-directed learning in their nurse training. The study findings will further assist nurse educators in re-designing and reviewing their teaching approaches to ensure that learners' interests drive the learning experiences. Thus, improving the quality of teaching and learning in the nursing education institutions.

There are no potential or real negative consequences of participation in the study but should participants experience discomfort of whatsoever nature with continuing with the research, they are free to withdraw at any time and without giving a reason. There are no penalties for withdrawal. The researcher will ensure the anonymity and confidentiality of participants' answers by using a code number or a pseudonym.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Ms. Tendai Maphosa on 76549106 or email: tendiemaphosa@gmail.com.

Should you have concerns about the way in which the research has been conducted, you may contact my research supervisor, Prof FH Mfidi on phone number 012 429 6731or email: mfidifh@unisa.ac.za. or the research ethics chairperson of the CREC, Prof KB Khan, on email: khankb@unisa.ac.za

Find attached;

- Study Protocol
- Ethics Clearance from UNISA
- CV of Researcher.
- GCP (Good Clinical Practice) certificate

- Consent Information Form (siSwati and English).
- Informed Consent Form (siSwati and English).
- Data Collection Tool Form (siSwati and English).
- Proof of Payment for Ethics Review.

Yours Sincerely



Tendai Maphosa

ANNEXURE C: APPROVAL FROM THE DEPARTMENT OF HEALTH ESWATINI



ESWATINI
HEALTH AND HUMAN
RESEARCH REVIEW BOARD
MBANDZENI HOUSE, 3RD FLOOR, CHURCH STREET
P.O. BOX 5, MBABANE, ESWATINI

ONE YEAR RESEARCH PROTOCOL APPROVAL CERTIFICATE

BOARD REGISTRATION NUMBER	FWA 00026661/IRB 00011253						
PROTOCOL REFERENCE NUMBER	EHHRRB 052/2024						
Type of review	Expedited	X		Full Board			
Name of Organization	**Masters Student**						
Title of study	Student-nurses' perceptions on the use of self-directed learning approaches in selected Eswatini nursing schools						
Protocol version	1.0						
Nature of application	New	Amendment		Renewal		Extension	CT updates
	X						
List of study sites	University of Eswatini and Southern African Nazarene University						
Name of Principal Investigator	**Ms. Tendai Maphosa**						
Names of Co- Investigators	Prof. F. H Mfidi						
Names of steering committee members in the case of clinical trials	N/A						
Names of Data and Safety Committee members in the case of clinical trials	N/A						
Level of risk (Tick appropriate box)	Minimal		More than minimal		High		
	X						
Initial study Approval information	**Approved**	X	**Study completion date**	31/12/2025	**Certificate expiry Date**	06/06/2025	
	Approval date	07/06/2024					
Study renewal approval information	**Renewal date**				**End date**		
Study amendment approval information	**Amendment date**						
Study extension approval information	**Extension date**				**End date**		
Signature of Chairperson							
Signing date	07/06/2024						
Secretariat Contact Details	Name of contact officers		**Babazile Shongwe**				
	Email address		es@ehhrrb.org.sz				
	Telephone no.		+268 2404 7751				

ESWATINI HEALTH & HUMAN RESEARCH REVIEW BOARD
07 JUN 2024
P.O BOX 5, MBABANE H100
TEL: (+268) 2404 7751
EHHRRB

ANNEXURE D: LETTER SEEKING PERMISSION TO CONDUCT STUDY AT THE UNIVERSITY OF ESWATINI

UNISA university of south africa

REQUEST FOR PERMISSION TO CONDUCT THE STUDY

Request for permission to conduct research at the University of Eswatini, Faculty of General Nursing.

Ms T Maphosa
House number 5 Manzini Street.
University of Eswatini
Kwaluseni Campus
Kwaluseni

19 February 2024

The Director
UNESWA Research Centre (URC)
P/B Luyengo
UNESWA

Dear Sir/Madam

I am Ms. Tendai Maphosa, currently registered for a Masters degree in nursing science at the University of South Africa under Professor Mfidi as my research supervisor. I am requesting permission to carry out my study at your Nursing Institution, the study entitled "**Student Nurses' Perceptions of the Use of Self-directed Learning Approaches in Selected Eswatini Nursing Schools".**

The aim of the study is to explore student nurses' perceptions of the use of self-directed learning approaches in selected schools of nursing in Eswatini. This study is expected to collect important information that could assist in improving teaching and learning

approaches in nurse education. The University of Eswatini has been selected to participate in the study because they are currently offering nurse training and education through the Bachelor of Nursing Science program offered by the Faculty of Health Sciences. A total of twenty final-year students from the school shall be requested to participate in the study.

The study will entail engaging students in a forty-minute semi-structured individual interview using an interview guide. The interview session shall be audio-recorded as per the participants' permission. All the information provided shall be treated with great confidentiality.

There is no obvious benefit for participating in this study, but the study findings will inform nurse educators on how students view the use and benefit of self-directed learning in their nurse training. The study findings will further assist nurse educators in re-designing and reviewing their teaching approaches to ensure that learners' interests drive the learning experiences and improve the quality of teaching and learning in the nursing education institutions.

There are no potential or real negative consequences of participation in the study but should participants experience discomfort of whatsoever nature with continuing with the research, they are free to withdraw at any time and without giving a reason. There are no penalties for withdrawal. The researcher will ensure the anonymity and confidentiality of participants' answers by using a code number or a pseudonym.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Ms. Tendai Maphosa on 76549106 or email: tendiemaphosa@gmail.com.

Should you have concerns about the way in which the research has been conducted, you may contact my research supervisor, Prof FH Mfidi on phone number 012 429 6731or email: mfidifh@unisa.ac.za. or the research ethics chairperson of the CREC, Prof KB Khan, on email: khankb@unisa.ac.za

Find attached;

- Study Protocol

- Ethics Clearance from UNISA

Yours Sincerely



Tendai Maphosa

ANNEXURE E: ETHICAL CLEARANCE CERTIFICATE FROM THE UNIVERSITY OF ESWATINI

UNIVERSITY OF ESWATINI

NOTICE OF APPROVAL

HUMAN SUBJECTS RESEARCH ETHICS COMMITTEE (HSREC)

Date:	29 April 2024
HSREC Ref. No.:	2024-HSREC-002-FR
Type of Application:	Full Review (FR)
Project Title:	**Student Nurses' Perceptions on the Use of Self-directed Learning Approaches in Selected Eswatini Nursing Schools**

Dear Ms. Tendai Maphosa,

Your Initial Application Forms for a Full Review of protection of human research participants in your study **re-submitted** on the 20 February 2024 was reviewed and **approved** by the REC: **Human Subjects Research Ethics Committee**.

Please note below expiration date of this approved submission:

Protocol approval date	Protocol expiration date
29 April 2024	29 April 2025

Investigator responsibilities

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the HSREC, the researcher must notify the REC of these changes.

Please use the HSREC Register Number, **2024-HSREC-002**, on any documents or correspondence with the HSREC concerning your project.

Please note that the HSREC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Continuation of projects after HSREC approval period

You are required to submit a progress report to the HSREC before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary).

Once you have completed your research, you are required to submit a final report to the HSREC for notification and review.

Included documents

Identity	File name	Date	Version
HSREC form	Application for ethics approval of confidential research involving human responses/participants	20.02.2024	1
Protocol	Full protocol	20.02.2024	1
Data collection tools	Draft data collection tool, Siswati data collection tool, consent form (English and Siswati versions), information sheet (English and Siswati versions	20.02.2024	6
Letters	Application letter	20.02.2024	1
Attachments	UNISA ethical clearance, CV, proof of registration	20.02.2024	1 1 1

If you have any questions or need further help, please contact the UNESWA Research Centre at research@uniswa.sz

Sincerely,



Prof. H. R. Mloza Banda
Director, UNESWA Research Centre

ANNEXURE F: LETTER SEEKING PERMISSION FROM THE UNIVERSITY OF NAZARENE

REQUEST FOR PERMISSION TO CONDUCT THE STUDY

Request for permission to conduct research at the Southern African Nazarene University (SANU), Faculty of General Nursing.

Ms T Maphosa
House number 5 Manzini Street.
University of Eswatini
Kwaluseni Campus
Kwaluseni

30 April 2024

The Registrar (Mr Mhlanga)
Southern African Nazarene University
Eswatini

Dear Sir.

I am Ms. Tendai Maphosa, currently registered for a Masters degree in nursing science at the University of South Africa under Professor Mfidi as my research supervisor. I am requesting permission to carry out my study at your Nursing Institution, the study entitled "**Student Nurses' Perceptions on the Use of Self-directed Learning Approaches in Selected Eswatini Nursing Schools".**

The aim of the study is to explore student nurses' perceptions of the use of self-directed learning approaches in selected schools of nursing in Eswatini. This study is expected to collect important information that could assist in improving teaching and learning approaches in nurse education. The Southern African Nazarene University has been selected to participate in the study because they are currently offering nurse training and education through the Bachelor of Nursing Science program offered by the Faculty of Health Sciences. A total of twenty final-year students from the school will be requested to participate in the study.

The study will entail engaging students in a forty-minute semi-structured individual interview using an interview guide. The interview session shall be audio-recorded as per the participants' permission. All the information provided shall be treated with great confidentiality.

There is no obvious benefit for participating in this study, but the study findings will inform nurse educators on how students view the use and benefit of self-directed learning in their nurse training. The study findings will further assist nurse educators in re-designing and reviewing their teaching approaches to ensure that learners' interests drive the learning experiences. Thus, improving the quality of teaching and learning in the nursing education institutions.

There are no potential or real negative consequences of participation in the study, but should participants experience discomfort of whatsoever nature with continuing with the research, they are free to withdraw at any time and without giving a reason. There are no penalties for withdrawal. The researcher will ensure the anonymity and confidentiality of participants' answers by using a code number or a pseudonym.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Ms. Tendai Maphosa on 76549106 or email: tendiemaphosa@gmail.com.

Should you have concerns about the way in which the research has been conducted, you may contact my research supervisor, Prof FH Mfidi on phone number 012 429 6731or email: mfidifh@unisa.ac.za. or the research ethics chairperson of the CREC, Prof KB Khan, on email: khankb@unisa.ac.za

Find attached;

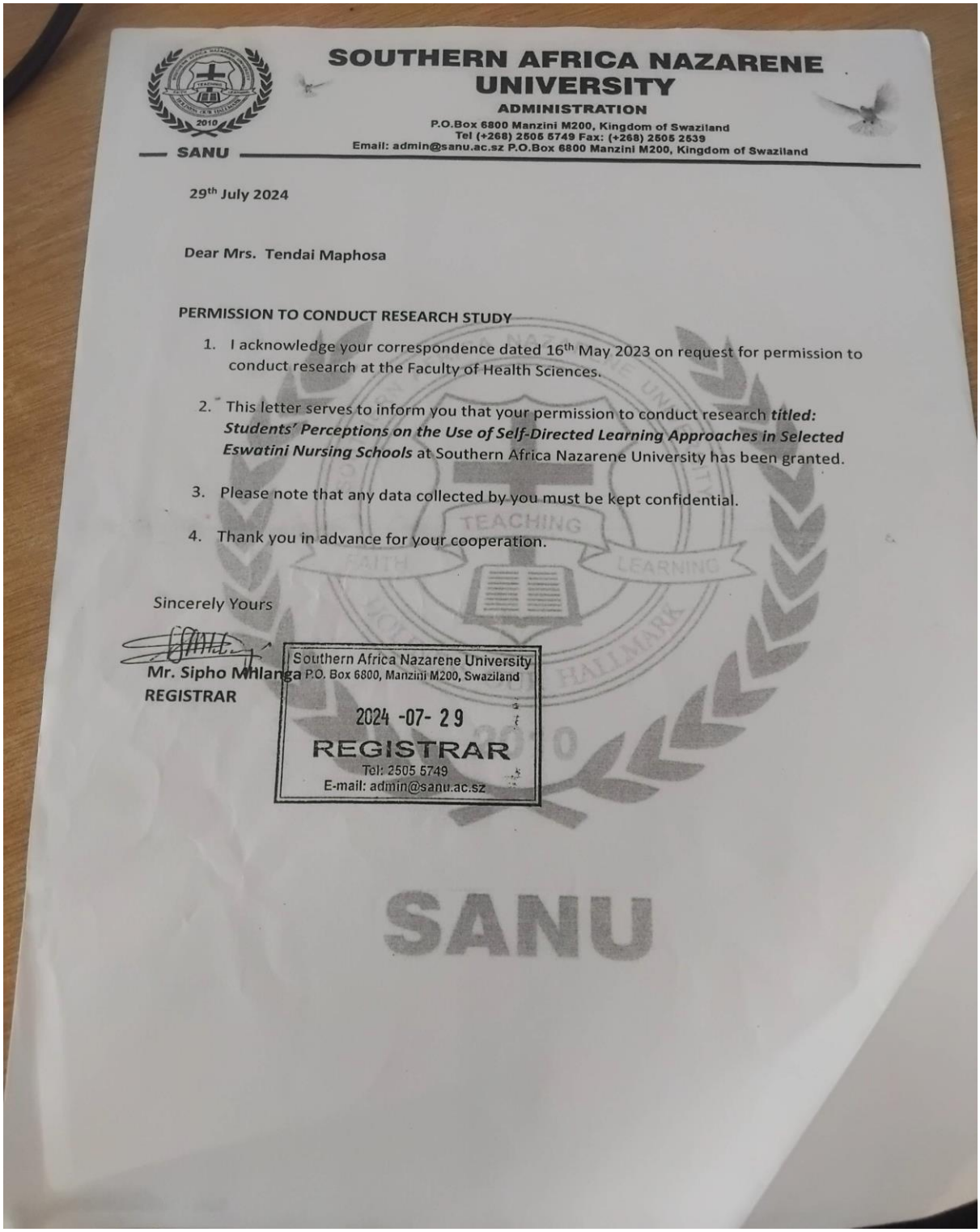
- Study Protocol
- Ethics Clearance from UNISA

Yours Sincerely



Mrs T. Maphosa

ANNEXURE G: APPROVAL FROM THE SOUTHERN AFRICA NAZARENE UNIVERSITY



SOUTHERN AFRICA NAZARENE UNIVERSITY
ADMINISTRATION
P.O.Box 6800 Manzini M200, Kingdom of Swaziland
Tel (+268) 2505 5749 Fax: (+268) 2505 2539
Email: admin@sanu.ac.sz P.O.Box 6800 Manzini M200, Kingdom of Swaziland
SANU

29th July 2024

Dear Mrs. Tendai Maphosa

PERMISSION TO CONDUCT RESEARCH STUDY

1. I acknowledge your correspondence dated 16th May 2023 on request for permission to conduct research at the Faculty of Health Sciences.
2. This letter serves to inform you that your permission to conduct research ***titled: Students' Perceptions on the Use of Self-Directed Learning Approaches in Selected Eswatini Nursing Schools*** at Southern Africa Nazarene University has been granted.
3. Please note that any data collected by you must be kept confidential.
4. Thank you in advance for your cooperation.

Sincerely Yours

Mr. Sipho Mhlanga
REGISTRAR

Southern Africa Nazarene University
P.O. Box 6800, Manzini M200, Swaziland
2024 -07- 29
REGISTRAR
Tel: 2505 5749
E-mail: admin@sanu.ac.sz

SANU

ANNEXURE H: PARTICIPANT INFORMATION SHEET

PARTICIPANT INFORMATION SHEET.

Dear Participant.

My name is Tendai Maphosa and I am doing research with Prof Mfidi, a Professor in the Department of Health Studies. The study is for the Master of Nursing Education at the University of South Africa. The study is self-funded.

We are inviting you to participate in a study entitled **Student Nurses' Perceptions on the use of Self-directed Learning Approaches in Selected Schools of Nursing in Eswatini**

I am conducting this research to find out nursing students understanding, experiences and practices of self-directed learning. The purpose is to understand training approaches in nurse training.

I am conducting this research study to find out nursing students understanding, experiences and practices of self-directed learning. The purpose is to understand training approaches in nurse training and there shall be no financial or material benefits for participating in the study.

This study is expected to collect important information that could assist in improving teaching and learning approaches in nurse education. You have been chosen to participate in the study because you are a current nursing science student undergoing nurse training. Your name was suggested to me by the head of department. However, your identity shall be protected together with the other students participating in the study. You shall make a voluntary decision to participate in the study and you are free to withdraw from the study at any time.

The study involves engaging you in a forty-minute interview. The interview questions shall focus on your understanding of self-directness learning, the self-directed learning approaches that you have been involved and the associated challenges. The interview session shall be recorded, and all the information provided shall be treated with great confidentiality.

As already noted, you are free to withdraw from the study even after having initially agreed to participate. There are no penalties for withdrawal. Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

There are no potential or real negative consequences of your participation in the study. You have the right to insist that your name not be recorded anywhere, and that no one, apart from the researcher and identified members of the research team, know about your involvement in this research. Your answers will be given a code number or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings.

Data anonymously collected for the study may be used for other purposes, such as a research report, journal articles and/or conference proceedings. However, for such purposes, your identity remains protected.

Hard copies of your answers will be stored by the researcher for a minimum period of five years in a locked cupboard/filing cabinet for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Indicate how information will be destroyed if necessary.

This study has received written approval from the Research Ethics Review Committee of the Department of Health Studies, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

If you would like to be informed of the final research findings, please contact Ms Tendai Maphosa on 76549106 or email tendimaphosa@gmail.com. The findings are accessible for five years.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Ms Tendai Maphosa on 76549106 or email tendimaphosa@gmail.com.

Should you have concerns about the way in which the research has been conducted, you may contact Prof Prof FH Mfidi on phone number 012 429 6731.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.



TENDAI MAPHOSA

ANNEXURE I: INFORMED CONSENT FORM

CONSENT TO PARTICIPATE IN THIS STUDY

Research title: Student nurses' perceptions on the use of self-directed learning approaches in selected schools of nursing in Eswatini

Researcher: Tendai Maphosa

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet. I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.
I agree to the recording of the interviews using an audio-recorder. I have

received a signed copy of the informed consent agreement.

Participant Name & Surname..... (please print)

Participant Signature.....Date.....

Researcher's Name & Surname: TENDAI MAPHOSA

Researcher's signature  Date: 10/02 2023

ANNEXURE J: DATA COLLECTION TOOL

DATA COLLECTION TOOL

Data shall be collected from students using semi-structured individual interviews. A purposive sample of eight final year students in each of the two selected schools of nursing shall be the sample for the study.

INTERVIEW GUIDE FOR STUDENT NURSES.

- Gender……
- Age ……..
- Programme of study ……..
- Year in college ……..
- Highest academic qualification ……..
- Type of high school attended a) rural b) town c) township d) any other

STUDY GUIDING RESEARCH QUESTIONS	INTERVIEW QUESTIONS
1. How do students view self-directed learning in nurse education in selected nursing schools?	• May you share with me your own understanding of what it means to be in charge of your own learning as a student in Nursing School? • In your opinion, should students rely largely on their tutors for learning? *Prompt: Why do you say so?* • How is it a bad learning approach for students to rely on tutors for their learning? *Prompt: Give an example of how bad this could be* • In your view, what are the advantages of students taking lead in learning in this nursing school? *Prompt: Are students doing enough to take a leading role in their learning?*
2. What are the common strategies employed by tutors in ensuring	• Do your tutors involve students fully in teaching and learning?

self-directed learning in selected nursing schools?	*Prompt: How do they involve students in learning? If they don't, how do they teach?* • Are there instances where students are asked to prepare for work before attending lectures? *Prompt: If so, how is this done?* • Are there any instances where students are allowed to teach others on some topics? *Prompt: If so, how is this done?* • Are there any instances where tutors give students topics to research on and present to others in class? *Prompt: If so, how is this done?* • Are there instances where students are allowed to assess each other? *Prompt: If so, how is this done?*
3. What are the barriers to effective SDL?	• How available are books and other print materials which students can use to read on their own? • Comment on the availability of time to prepare for and follow up on lectures. • How available are internet facilities in the Nursing School? If available, how do students utilise the facilities? • In your opinion, do students have adequate research skills that they can search for theory and own information related to topics studied? • In your opinion, how confident are students in the use of English for sharing information with other students? • How do students utilise time outside lecture hours to study? • Are there facilities in places of residence that students can utilise to study? *Prompt: If so, how do students utilise such Facilities?*

End of interview. Thank you very much for taking time off your busy schedule to respond to my questions. I'm so grateful.

ANNEXURE K: SAMPLE INTERVIEW TRANSCRIPT

Codes were used for confidentiality and anonymity. Interviews were digitally recorded, and permission was obtained for the recording. They were conducted in English and scheduled according to the participants' preferences.

TITLE: Student nurses' perceptions of the use of self-directed learning approaches in selected Eswatini nursing schools.

PARTICIPANT	QUESTION ASKED	RESPONSE
University Nursing School A Participant 1 24 years Female Fourth-year Specialising in Midwifery Date: 25 July 2024 Time: 1245hrs Duration:	Introduction	**Interviewer**: Welcome to the interview session **Participant 01**: Thank you **Interviewe**r: Thank you for your time, how old are you? **Participant 01**: I am 24 years old. **Interviewer**: You are 24 years old? In which year are you? **Participant 1:** Fourth-year. I**nterviewer:** What's your program of study? **Participant 01:**Bachelor of Nursing Science and Midwifery
	1 How do students view self-directed learning in nurse education in selected nursing schools?	I**nterviewer**: What are your views regarding self-directed learning? **Participant 01:** SDL is the process where "the lecturer comes in front of you and introduces a certain topic, then you as a student is expected to be the one who is willing to understand more of what the lecturer has taught you. **Interviewer:** Why is it important for you as a student to seek more information?

		Participant 01: I think there is a need for a balance between tutor guidance and student independence. Interviewer: **Interviewer:** How is it a bad learning approach for students to rely on tutors for their learning? **Participant 01:** There will be potential for student laziness if overly reliant on tutors. **Interviewer:** Why do you say so? **Participant o1**: We sometimes become stereotypes, like we focus on what they've given us instead of getting to know more information **Interviewer:** In your view what are the advantages of students taking the lead in learning in this nursing school? **Participant 01:** It Promotes a therapeutic learning environment. **Interviewer:** Why do you say so? **Participant01:** There is the encouragement of knowledge sharing and diverse perspectives. **Interviewer:** Are students doing enough to take a leading role in their learning? **Participant 01:** "Not really. Students want to rely on tutors." **Interviewer:** Why do you say so?

		Participant 01: We have little exposure to SDL.
	2. What are the common strategies employed by tutors in ensuring self-directed learning in selected nursing schools?	**Interviewer:** Can you tell me learning approaches used in your nursing school to enhance SDL? **Participant 01**: We study together, help each other, and teach each other during group discussions. I**nterviewer**: Are there instances where you as students prepare before attending lectures? **Participant 01:** After a lecture, they will tell us next week or the following day discussing on a certain topic." **Interviewer:**: If so, how is this done? **Participant 01:** "This is done through a group assignment whereby they will give us an assignment." **Interviewer**: Are there instances where you as students assess each other? **Participant 01:** Yes during group presentations. **Interviewer:** How is that done? **Participant 01:** Through questioning. **Interviewer:** Do you as students have enough time to prepare for lectures? **Participant 01:** Sufficient time is available for preparation, but individual preferences vary.

	3 What are the barriers to effective SDL	**Interviewer:** What do you perceive as barriers to effective SDL? **Participant 01:** There is underutilization of libraries and study facilities. **Interviewer:** Why do you say so? **Participant 01:** Students often study only during exam periods. **Interviewer:** How available are books and other print materials which students can use to read on their own? **Participant 01**:Resources such as books and research materials are available though they are not enough. I**nterviewer**: Do students utilise the available resources? **Participant 01:** Students may not be fully aware of or seek out available resources **Interviewer**: Comment on the availability of Internet facilities in the Nursing School. **Participant 01:** The Internet is there but is not reliable, right now it is down. **Interviewer:** When it is there do students utilise it for academic purposes? **Participant 01:** As for me yes, I don't know others. **Interviewer:** In your opinion do students have adequate research skills that they can search for theory own information related to topics studied? **Participant 01:** No we don't.

		Interviewer: We are still learning, we get assistance from others and from our lecturers. I**nterviewer:** In your opinion how confident are students in the use of English in sharing information with other students? **Participant 01:** "They are not confident. They prefer to use their mother language, Siswati. **Interviewer:** Do you think its wise to share information in your mother language? **Participant 01:** "No, When you try to put it in Siswati, it comes out differently." **Interviewer:** How do students utilise time outside lecture hours to study? **Participant 01:** We go shopping, most of us will be on social media, **Interviewer:** Are there facilities in places of residence where students can utilise to study? **Participant 01:** Study spaces are not enough in our places of residence, we go to the library or study in our rooms. **Interviewer:** We have come to the end of our session. Thank you. **Participant 01:** Thank you ma'am.

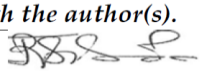
APPENDIX L: LANGUAGE EDITING CERTIFICATE

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