EXPERIENCES OF REFLECTIVE PRACTICE AMONG FINAL YEAR UNDERGRADUATE NURSING AND MIDWIFERY STUDENTS AT TWO NURSING UNIVERSITIES

MPHATSO KAPACHIKA

A Thesis submitted to the Faculty of Health Sciences in partial fulfilment of the requirements for the award of the degree of Master of Science in Nursing Education (Clinical Teaching)

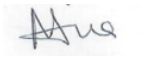
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF NURSING AND MIDWIFERY
MZUZU UNIVERSITY

APRIL, 2025

DECLARATION

By submitting this research report, I, **Mphatso Kapachika**, formally affirm that the entirety of the work contained herein is my original creation. I further attest that I am its sole author, except where explicitly stated otherwise, and declare that no part of this report has been previously submitted, either in whole or in part, for any academic qualification.

Full Name : MPHATSO KAPACHIKA

Signature : 

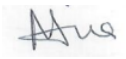
Date : MARCH, 2025

AUTHENTICATION

TOPIC: EXPERIENCES OF REFLECTIVE PRACTICE AMONG FINAL YEAR UNDERGRADUATE NURSING AND MIDWIFERY STUDENTS AT TWO NURSING UNIVERSITIES.

STUDENT'S NAME: **MPHATSO KAPACHIKA, BScN, UCM**

REGISTRATION NUMBER: (MScNECT0720)

STUDENT'S SIGNATURE: 

SUPERVISORS' CERTIFICATION OF APPROVAL

The undersigned certify this thesis represents the student's work, and that it has been submitted with our approval.

Signature: ……..... Date: …….

Thokozani Bvumbwe, PhD.

(Main Supervisor)

Signature: …… Date: ……

Masumbuko Baluwa, MSc.

(co-Supervisor)

ACKNOWLEDGEMENTS

All glory and honour be to God Almighty for abundantly blessing me beyond what I could ever deserve.

Sincere thanks and appreciation go to my husband (Mannie Twea), my sisters: Chimwemwe, Gloria and Mphanice, brother in-law (Mr. M. Chisale), sons and nieces for being my strength to continue on this academic journey. Your love, prayers, encouragement and support mean the world to me.

My supervisors, Assoc. Prof. T. Bvumbwe, Dr. L. Mhango and Mr. M. Baluwa for all your help and guidance, more importantly for believing in me.

I thank all final year undergraduate nursing and midwifery students from Mzuzu and Daeyang Universities who participated in the study for your acceptance, time and input.

I acknowledge Assoc. Prof. B. C. Mbakaya and Mr. H. Nkhoma, for your support and guidance.

DEDICATION

This research work is dedicated to my sons Trust and Themba. You are my driving force.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS

CHAM	:	Christian Health Association of Malawi
FGD	:	Focus Group Discussion
MMR	:	Mixed Methods Research
MZUNI	:	Mzuzu University
MZUNIREC	:	Mzuzu University Research Ethics Committee
NMCM	:	Nurses and Midwives Council of Malawi
RP	:	Reflective Practice

OPERATIONAL DEFINITIONS

Clinical Learning Environment: Social interactions, organisational cultures and structures, as well as physical and virtual environments that influence and shape students' experiences, perceptions, and learning processes (Larson, 2018).

Qualified Nurse: A person who has completed a programme of basic, generalised nursing education and is authorised by the appropriate regulatory body to practice nursing in her/his country (International Council of Nurses, 1987). The terms qualified nurse, clinical instructor and preceptor are used interchangeably in this study.

Reflection: Active, persistent and careful consideration of any belief or supposed form of knowledge in the light of grounds that support it and the further conclusion to which it ends (Dewey, 1933).

Reflection-in-action: A thought process that occurs as an experience unfolds, guiding action with the experience (Schon, 1983).

Reflection-on-action:A retroactive critical analysis to create and recreate incidents (Bulman & Schutz, 2013). It is a means by which nurses and students connect theory and practice.

Reflective Practice: Refers to a reflective approach undertaken before, during, and after experiences, aimed at enhancing understanding of oneself and the circumstances involved, to better navigate similar situations in the future. (The International Association for Medical Education (AMEE).

Undergraduate nursing and midwifery student: An individual enrolled in the four-year Bachelor of Science in Nursing and Midwifery program at a designated nursing education institution in Malawi.

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Background: Nursing is a practice-profession requiring continuous reflection on actions for improving care, professional growth, and ensuring ethical practice. Despite its significance, reflective practice in nursing education in Malawi remains under-researched. This study aims to assess final-year undergraduate nursing and midwifery students' experiences of reflective practice at Mzuzu University (MZUNI) and Daeyang University.

Method: The study employed a concurrent convergent triangulation mixed methods research design. The study had two settings; MZUNI and Daeyang University with a study population of 136 students. 12 students participated in focus group discussions (FGDs). One FDG was conducted at each site comprising of six participants each. The FGDs were guided by an in-depth semi-structured interview guide. A self-administered survey questionnaire was used to collect data from 101 students. Qualitative data were thematically analysed while quantitative data were analysed through descriptive statistics and multivariate linear regression by Statistical Package for the Social Sciences (SPSS) Version 25.

Results: The results revealed that students have knowledge of reflective practice. Students conceded to the importance of reflective practice for improving their clinical care outcomes. The study found that more than 98% of the students engage in reflective practice. Multivariate linear regression results showed that better care outcomes negatively support the practice of reflection among the students (Coef= -0.11), (95% CI [-0.19, -0.03] P =0.009). The study identified reflective practice enablers to be either motivational or educational. Barriers to reflective practice included unsupportive Clinical Learning Environment and time constraints. Further, Daeyang University students reported significantly more support from nurses compared to Mzuzu University students ($X^2 = 5.32$, P = 0.02).

Conclusion: Findings indicate widespread knowledge and application of reflective practice, highlighting challenges such as integrating structured reflection sessions and standardized curricula. Addressing these challenges can enhance reflective practice's effectiveness in nursing education and professional development.

Key words: Reflection, Reflective Practice, Nursing and Midwifery Students, Undergraduate Students

CHAPTER ONE

INTRODUCTION AND BACKGROUND INFORMATION

1.0 Introduction

Reflective practice has become a vital aspect of nursing education, recognized as a key component in developing students' professional identity (Boyd, 2022; Mahon & O'Neill, 2020; Shin et al., 2023). This practice encourages students to critically assess their clinical experiences, analysing past and present scenarios to deepen their understanding of decisions and actions. In nursing and midwifery education, there is a deliberate focus on practice-based learning, which emphasises the importance of hands-on experience as a means to develop critical thinking and self-awareness. This form of learning encourages professionals to actively engage in reflection as a way of refining their clinical skills and improving future patient care by carefully evaluating what is happening in real-time or what has already occurred (Horton-Deutsch & Sherwood, 2023; O'Brien & Graham, 2020). In the nursing profession, it is not enough to simply follow established routines or carry out the daily formalities of practice. Professionals must be able to respond thoughtfully to complex situations. This method emphasises the importance of nurses continually learning from their experiences, adjusting their approaches through thoughtful reflection and analysis. Such practices contribute to better patient outcomes and foster professional development. Reflective practice not only aids in refining nursing expertise but it also serves as a crucial element in cultivating compassionate, skilled, and patient-focused care (Contreras et al., 2020).

Barbagallo (2020) states that reflection plays a critical role in the development of key competencies in nursing and midwifery practice, particularly in clinical judgment, decision-making, accountability, and critical thinking. Reflective practice enables healthcare professionals to evaluate their actions, examine the results, and make well-informed choices to improve the quality of patient care. Within nursing and midwifery education, it is widely acknowledged as a powerful learning tool that helps students gain a more profound understanding of clinical scenarios, fostering confidence in making accurate, evidence-based decisions. Research has consistently demonstrated that reflection helps students move beyond surface-level learning, enabling them to become independent thinkers capable of applying their knowledge in complex and dynamic clinical settings (Al-Kofahy & James, 2017; McCarthy et al., 2021; Parwanda, 2022; Scheel et al., 2021). The process of self-reflection and analysis is

crucial for developing clinical judgment, as it prompts students to examine the technical components of care and the ethical, emotional, and cultural factors involved in patient interactions.

Karnieli-Miller (2020) emphasises that reflective practice offers more than just an avenue for improving clinical skills; it provides an opportunity for personal and professional growth. Through reflective practice, students and practitioners develop a more profound understanding of their own identities, values, and responses to various clinical scenarios. This self-awareness is critical in helping them navigate complex and sometimes sensitive situations with greater empathy and insight. Additionally, reflective practice fosters an understanding of others—be it patients, families, or colleagues—and promotes a more holistic approach to care (Austin et al., 2020). Through reflection on their experiences, nursing and midwifery students gain a deeper understanding of the varied perspectives and complexities encountered in healthcare environments, thereby promoting more empathetic and culturally sensitive care. As such, reflection is not only an educational tool, but it is also a vital process for developing the emotional intelligence, ethical awareness, and interpersonal skills necessary for effective and compassionate practice in the healthcare field.

Reflective practice has become a topic of increasing interest and emphasis in healthcare educational programmes, particularly within nursing and midwifery, as its importance to both learning and professional development is widely recognised (Noora Ahmed et al., 2024; Bijani et al., 2021). The increasing acknowledgment of reflection within nursing and midwifery education is driven by its vital role in the learning process, fostering students' critical thinking, self-evaluation, and the integration of practical experience with theoretical knowledge. Reflection provides students with a deeper understanding of their clinical experiences, encouraging them to examine their actions, decisions, and the outcomes in a way that promotes continuous learning and professional growth (Galutira, 2018; Ingham-Broomfield, 2021). By reflecting on their practice, nursing and midwifery students are able to expand the body of knowledge within these fields, making reflection not only a tool for personal growth, but it is also a mechanism for contributing to the broader nursing and midwifery knowledge base.

In many developing nations, reflection has been integrated into the nursing education curriculum, particularly in programmes designed for obtaining professional nurse or midwife registration. These programmes typically include dedicated modules on reflective practice, ensuring that students are equipped with the skills needed to engage in reflective thinking early

in their education (Contreras et al., 2020; Ekelin et al., 2021; Graham & O'Brien, 2020 & McCarthy et al., 2021). Integrating reflective practice is essential as it cultivates critical thinking. This encourages students to be independent and proactive learners. By employing diverse teaching and learning methods, including reflective journaling, case study analyses and peer discussion, students are guided to actively interact with their experiences, deepening their comprehension of both the practical and theoretical components of their education (Adams, 2018).

Furthermore, reflective practice plays a crucial role in bridging the theory-practice gap in nursing education, where students often face challenges in applying theoretical knowledge to real-world clinical situations. By encouraging students to reflect on their practice, educators can facilitate the integration of theory into everyday practice, which enhances the development of professional competencies. This reflective process not only supports the individual student's growth, but it also contributes to the improvement of clinical practice and the overall quality of care in the healthcare system (Bijani et al., 2021). Reflective practice equips nursing and midwifery students to effectively handle the intricate challenges of their profession, enabling them to become more skilled, empathetic, and efficient healthcare practitioners.

Studies consistently highlight the critical role that nurse educators and clinical instructors play in instilling and nurturing reflective practices among nursing students (Adam, 2018; Noora Ahmed et al., 2024; Artioli et al., 2021). These educators and instructors are responsible for not only introducing reflective practices into the curriculum, but also providing ongoing guidance and support as students develop these skills throughout their training. Reflective practice is not a one-time event but rather an ongoing process that requires continuous reinforcement in both academic and clinical settings (Kinsella, et al., 2021). While considerable time and resources are dedicated to teaching students how to reflect on their practice, the success of this learning process is often contingent upon the support and mentorship students receive during their clinical placements (Smith, 2021). Without ongoing support, the success of reflective practice may be undermined, as students could face challenges in effectively applying reflection to real practical situations, thereby reducing its influence on their professional development.

The support provided by clinical instructors and educators is crucial in facilitating a seamless and successful progression from being a student nurse to becoming a professional nurse (Graham & O'Brien,2020). Clinical instructors offer real-time feedback, mentorship, and

reassurance, helping students navigate the challenges they face in practice (Adams, 2018). This supportive environment fosters greater self-confidence, helping students become more competent in their clinical skills while also developing their ability to reflect critically on their actions and decisions (Kaphagawani, 2015). When students receive constructive feedback and encouragement from their instructors, they are more likely to feel secure in their evolving professional identity and responsibilities, allowing them to confidently assume their roles as healthcare providers (Adams, 2018; Aziz et al., 2020).

Conversely, insufficient support from clinical instructors can leave students feeling uncertain and anxious about their practice, creating a gap in their professional development. Students who do not receive the necessary guidance may struggle to integrate reflective practices effectively, which can impede their capacity to make well-informed decisions, collaborate with others, and assume accountability in their clinical role. Consequently, the availability or absence of support significantly influences their overall learning journey and preparedness to fulfill the duties of a registered nurse or midwife. Therefore, it is crucial for educators and clinical instructors to actively engage with students, offering mentorship and encouragement to facilitate their smooth transition into the professional realm.

There is growing evidence that nursing and midwifery educational institutions in Malawi are heavily reliant on qualified nurses to teach students due to a significant shortage of faculty members within these institutions (Bvumbwe & Mtshali, 2018; Mhango, et al., 2021). Given this shortage, the responsibility for providing both theoretical and clinical education often falls on practicing nurses who are already working full-time in healthcare settings.

While these nurses are essential to the education and growth of future professional nurses and midwives, they are frequently overburdened with heavy workloads, which restricts their capacity to offer the necessary support and guidance to students (Mbakaya et al., 202020). Research has shown that many qualified nurses in Malawi report feeling exhausted and overwhelmed by their duties, which significantly impacts their ability to effectively support students during clinical placements (Bradley et al., 2015). This lack of support can have a detrimental effect on students' clinical learning experiences, as these nurses are often unable to dedicate enough time to mentoring, guiding, or providing feedback to students in a way that promotes deep learning and skill development.

Additionally, clinical nurses in Malawi frequently feel unprepared to provide sufficient support to nursing and midwifery students during their practical training. Many highlight a lack of proper training, resources, and structured mentorship, which hinders their ability to effectively educate and guide students in clinical settings (Mbakaya et al., 2020). This deficiency is exacerbated by the fact that many clinical nurses do not receive formal training in teaching or mentoring, which further hampers their ability to support students in meaningful ways. Without sufficient support and guidance from clinical instructors, students may struggle to bridge the gap between theory and practice, hindering their ability to develop critical clinical skills and confidence.

However, it is well established that the quality of clinical learning is directly influenced by the level of support that students receive from their clinical instructors (Azmi et al., 2024; Panda et al., 2021; Soroush et al., 2021). Effective mentorship, timely feedback, and direct involvement in students' clinical experiences are essential for fostering analytical thinking, clinical decision making, and practical competency. Absence of such support, or the provision of inadequate mentorship, can result in gaps in students' learning and professional development, ultimately affecting their nursing care provision in the future. It is essential to tackle the challenges encountered by clinical instructors in Malawi, including heavy workloads, limited resources, and inadequate training, to ensure that nursing and midwifery students are provided with the necessary guidance and support to excel in their education and transition smoothly into professional practice.

Reflective practice experiences of final-year undergraduate students are crucial for their growth and as professionals since they are expected to have honed their reflective skills throughout their academic journey. By the final year, they should demonstrate a high level of competency in reflection, which is essential for continuous learning and self-improvement in their clinical roles. Evaluating their experiences not only provides insight into the effectiveness of their training, but it also serves as a form of exit assessment. This evaluation is crucial as it ensures that soon-to-be qualified nurses and midwives can thoroughly analyse their actions, recognise areas needing improvement, and apply insights gained to elevate patient care quality. Consequently, this study seeks to assess experiences of reflective practice among final-year undergraduate nursing and midwifery students at Mzuzu University and Daeyang University, with the goal of identifying strengths, challenges, and opportunities for improvement to better equip them for the demands of professional practice.

1.1 Background Information

Reflection is a fundamental human activity that plays a pivotal role in cognitive development and personal growth, serving as a cornerstone for learning and self-improvement (Donohoe et al., 2022; Ingham-Broomfield, 2021; Karnieli-Miller, 2020). It is an innate process that individuals engage in to varying degrees, as highlighted by Boyd (2022). Reflection can take place spontaneously during an activity or deliberately afterward, allowing for a deeper analysis when there is more time or the opportunity to thoughtfully consider the events. The triggers for reflection are varied and extensive, including daily situations, both favourable and challenging experiences, notable or impactful moments, extraordinary or uncommon incidents, regular tasks, and significant occasions of particular relevance. These sources of reflection, as noted by Ingham-Broomfield (2021), provide a foundation for individuals to examine their actions, thoughts, and feelings, fostering a cycle of continuous learning and adaptation. Engaging in reflective practice enables individuals to gain deeper insights into themselves, their experiences and environment, ultimately fostering both personal and professional development.

Reflection has been defined in numerous ways by various scholars, organisations, and disciplines, highlighting its multifaceted nature and significance in personal and professional development. According to International Association for Medical Education (AMEE), reflection is "a metacognitive process that occurs before, during, and after situations with the purpose of developing a greater understanding of both the self and the situation so that future encounters with the situation are informed from previous encounters". This definition highlights the evolving and cyclical process of reflection, emphasizing its importance in deepening awareness and deriving valuable lessons from experiences.

Reflection is a continuous journey in which individuals thoughtfully examine their daily experiences (Smith, 2021). It involves analysing a situation or incident, assessing their personal emotions, and critically evaluating how their actions and decisions were influenced. This self-reflective process enables individuals to extract meaningful insights from their experiences by recognising their strengths, addressing weaknesses, and pinpointing areas for improvement. Additionally, it fosters critical evaluation of potential responses to future scenarios, enhancing adaptability and supporting well-informed decision-making.

Through this process, reflection becomes a powerful tool for self-improvement, enabling individuals to bridge the gap between past experiences and future actions. It not only enhances

personal understanding and emotional intelligence but also strengthens the ability to navigate complex situations with greater insight and confidence.

1.1.1 History

Reflection has a rich and enduring history, deeply rooted in intellectual traditions and it is widely recognised for its importance across numerous professions (Bass et al., 2019; Gilheaney & Quigley, 2021; Gaeeni, et al., 2021; Ingham-Broomfield, 2021; Richard et al., 2019). The idea of reflection dates back to the philosophers Aristotle and Socrates, who regarded reflection as a foundational tool for acquiring knowledge and achieving personal and intellectual growth (Miraglia & Asselin, 2015).

Aristotle, in particular, emphasised the importance of engaging with emotions and imagination as integral components of developing a comprehensive and ideal understanding of the world (Bulman et al., 2020). He advocated for the use of reflection to gain practical wisdom, improve responsiveness to experiences, and cultivate a deeper understanding of events and their implications (Nussbaum, 1990). Socrates, through his method of questioning, encouraged critical self-reflection as a means of uncovering truths, challenging assumptions, and fostering intellectual rigour.

Over centuries, these foundational ideas have evolved and found relevance in diverse fields, including education, healthcare, and the arts. In professional contexts, reflection is now regarded as a vital skill that supports continuous learning, promotes ethical choices, and enhances adaptability to challenging circumstances. By revisiting and re-evaluating experiences, individuals are able to refine their practices, develop emotional intelligence, and enhance their overall effectiveness, making reflection an indispensable tool for both personal and professional growth.

John Dewey, the renowned American philosopher and educator, significantly advanced the idea of reflection as a key element in the learning process during his lifetime (1859–1952). His ideas have profoundly influenced modern educational theory. Dewey proposed that learning is an active process rooted in experience, emphasising that we gain knowledge not only by doing, but also by understanding and analysing the outcomes of our actions (Dewey, 1933). His theory suggests that reflection is essential for meaningful learning, as it involves recalling an event, critically questioning why things unfolded as they did, and exploring alternative actions or

strategies that might have led to different outcomes. This iterative process helps individuals deepen their understanding and it improves future decision-making.

Dewey also emphasised that effective reflection requires certain personal qualities, such as courage and open-mindedness. Courage is necessary to confront and critically evaluate one's actions and assumptions, while open-mindedness allows for the consideration of new ideas and perspectives. Dewey described reflection as an "active, persistent, and thoughtful examination of any belief or assumed knowledge, considering the evidence that supports it and the conclusions it leads to" (Dewey, 1933, p. 9). This explanation highlights the intentional and evolving process of reflection, characterised by ongoing inquiry, evaluation, and learning.

Dewey's work laid the foundation for reflective practice, which has since become a cornerstone in education, healthcare, and various other professional fields. By encouraging individuals to engage deeply with their experiences and to think critically about their actions, reflection supports the development of knowledge while also driving personal and professional advancement, nurturing a mindset of lifelong learning.

The application of reflection as a learning tool in allied health education, including nursing, originates from Donald Schön's work in 1983, which expanded upon John Dewey's foundational principles of experiential learning. While Dewey highlighted the importance of reflection for understanding and learning from experiences, Schön concentrated on its relevance to professional practice, delving deeper into how practitioners reflect on real-world experiences to develop insights. His work has profoundly influenced contemporary ideas of reflective practice, establishing it as a fundamental element in professional education and development across various fields (Miraglia & Asselin, 2015).

Schön presented the key ideas of *reflection-in-action* and *reflection-on-action*, which are now central to understanding how professionals acquire knowledge and adjust in their practice. *Reflection-in-action* involves real-time thought processes that take place as an event or experience unfolds. It highlights a practitioner's capacity to analyse situations critically and modify their actions on the spot, drawing on intuition, experience, and reasoning to handle changing conditions effectively. This form of reflection is particularly valuable in dynamic and high-pressure environments, such as healthcare settings, where quick and thoughtful decision-making is essential.

Conversely, reflection-on-action takes place after an event has occurred. This process involves reviewing the experience, analyzing what transpired, assessing the decisions made and actions taken, and drawing insights to improve future practices. It is a more intentional and organized approach that helps practitioners acquire new knowledge, enhance their understanding, and pinpoint areas for growth.

Schön's framework highlights the dual nature of reflective practice, emphasizing that learning and professional growth occur both during and after experiences. This dual approach not only enhances immediate problem-solving abilities, but it also contributes to long-term skill development, critical thinking, and adaptive expertise. By embedding these reflective practices into allied health education, including nursing, educators aim to prepare students to navigate the complexities of professional practice, improve their clinical judgment, and deliver high-quality, patient-centered care.

1.1.2 Models of Reflection

Over the years, many models of reflection have been developed, each offering a structured framework to facilitate the evaluation of experiences, promote learning, and encourage ongoing improvements in practice (Ingham-Broomfield, 2020). These models are particularly valuable in healthcare education, where they support practitioners and students in critically analysing their actions and integrating lessons learned into clinical practice. By encouraging ongoing contemplation and creativity, reflection frameworks help individuals enhance their abilities, make better choices, and provide superior levels of care.

Most widely recognised models of reflection in nursing and midwifery education and practice are those introduced by Gibbs (1988), Schön (1991), and Kolb (1984). Their adaptability makes them suitable for addressing a range of professional issues, from clinical decision-making to interpersonal communication and ethical dilemmas (Bass et al., 2019).

Although reflective models differ, they commonly include several stages that guide individuals through a thorough reflective process. These typically involve:

Description: Providing a detailed account of the event or experience, addressing the what, when, where, and who to establish context.

Feelings: Examining the emotions and thoughts experienced during the event to reveal personal biases, attitudes, and perspectives.

Evaluation: Critically assessing whether the event was positive or negative and exploring its impact on all involved parties.

Analysis: A deeper examination of the underlying factors that influenced the event, identifying areas of strength and opportunities for improvement.

Conclusion: Focuses on extracting insights from the experience, identifying lessons learned, and determining strategies for future improvement.

Action Plan: Developing specific strategies for applying the insights gained to future practice, ensuring continuous professional development and improved outcomes.

These reflective frameworks assist practitioners in methodically analysing their experiences while bridging the divide between theoretical knowledge and practical application. By promoting careful reflection on both achievements and obstacles, these models enhance critical thinking, self-reflection, and professional development—key attributes for nurses and midwives working in challenging and dynamic healthcare settings.

Gibbs' Reflective Cycle serves as a central framework at Mzuzu University and Daeyang University, aiding undergraduate nursing and midwifery students in learning and applying reflective practice effectively. This structured model provides students with a systematic approach to analyse their clinical experiences, facilitating deeper learning and skill enhancement. The implementation of Gibbs' Reflective Cycle reflects the universities' dedication to cultivating skilled healthcare professionals who excel in critical thinking and embrace continuous self-improvement in their practice. Furthermore, literature highlights the importance of reflective practice in developing professionals who are not only skilled in technical aspects, but also adept at addressing the emotional and ethical dimensions of patient care. By adopting Gibbs' Reflective Cycle, both universities ensure that their nursing and midwifery students are well-equipped to engage in lifelong learning, adapt to the complexities of healthcare environments, and contribute to improving patient outcomes through reflective and evidence-based practice.

Gibbs' Reflective Cycle

Introduced in 1988 by educational researcher Graham Gibbs, Gibbs' Reflective Cycle is a highly regarded framework for promoting organised and systematic reflection. Gibbs conceptualised reflection as a cyclic process, allowing practitioners to systematically explore their experiences and derive meaningful insights (Ingham-Broomfield, 2020). This model guides individuals through six distinct stages that promote a thorough and thoughtful examination of situations or events, making it particularly effective in both educational and professional contexts.

The phases of Gibbs' Reflective Cycle involve the following:

Description: Providing an objective recount of the event, emphasizing key elements to set the scene. (What occurred?)

Feelings: Delving into the emotional and mental reactions experienced during the situation. (What emotions did you feel?)

Evaluation: Offering a balanced review of the event, identifying both its positives and negatives. (What went well and what didn't?)

Analysis: Conducting an in-depth exploration to uncover contributing factors and derive valuable lessons. (What insights can be gained?)

Conclusion: Extracting lessons from the reflection to consider alternative approaches for the future. (What could you have done better?)

Action Plan: Developing a strategy to apply the insights gained, ensuring improved responses and actions in similar future situations. (If it happens again, what would you do?)

The most critical component of this cycle is the action plan, as it formalises the learning outcomes of the reflective process and ensures that the insights gained are translated into improved practice. This forward-looking step emphasises the application of lessons to future scenarios, enabling continuous professional development and adaptability.

Gibbs' Reflective Cycle is widely acknowledged as one of the most frequently employed models of reflection in nursing and midwifery education and practice (Bass et al., 2019;

Bulman et al., 2020; Ingham-Broomfield, 2020; O'Brien & Graham, 2020). This framework is particularly valuable in these fields because it provides a structured approach, enabling students to integrate theoretical knowledge with practical application. By guiding learners through the reflective process, Gibbs' model cultivates critical thinking, emotional intelligence, and the ability to learn from both achievements and setbacks. It allows students to recognize their strengths and identify areas needing improvement, ultimately refining their clinical judgment and decision-making skills.

Similarly, Alsalamah et al., 2022; Galutira, 2018; Marshall et al., 2022; Nukpezah et al., 2021 highlight that Gibbs' Reflective Cycle aligns effectively with the principles of adult learning, or andragogy, which underpin higher education strategies in nursing and midwifery programmes. By incorporating active involvement, self-direction, and practical relevance, this model supports students in taking ownership of their learning. It encourages them to critically engage with their experiences and identify areas for growth, which is particularly important in healthcare education.

Furthermore, Gibbs' Model is frequently recommended for novice reflective practitioners due to its comprehensive nature and the inclusion of prompt questions at each stage, which guide individuals through the reflection process (Noora Ahmed et al., 2024; McCarthy et al., 2021). These prompts make the model accessible and user-friendly, ensuring that even those new to reflective practice can effectively engage in meaningful reflection. By offering a well-defined and organized structure, Gibbs' Reflective Cycle enables practitioners to develop self-insight, strengthen critical thinking skills, and cultivate a commitment to ongoing learning and growth.

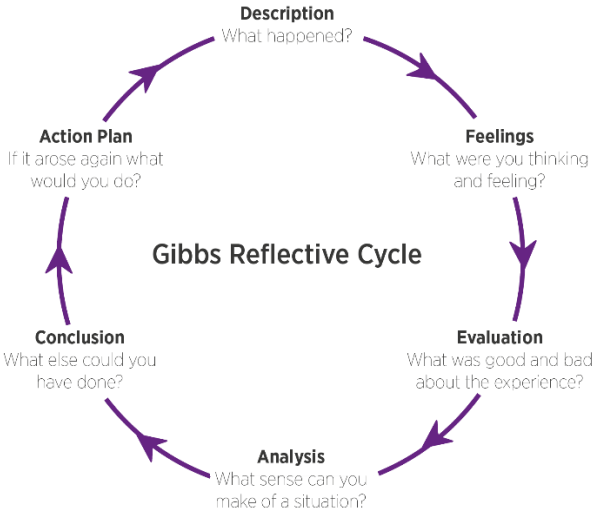


Figure 1.1: Gibbs' Reflective Cycle.

Although effective models and frameworks for reflective practice have been developed in nursing and midwifery education, putting them into practice still presents considerable difficulties. Many students and professionals report that engaging in reflective practice is time-consuming, anxiety-provoking, and requires a high level of support to be effective (Barbagallo, 2020). These barriers often discourage consistent engagement, limiting the potential benefits of reflection in fostering critical thinking and professional growth.

Numerous studies have highlighted further obstacles to sustaining reflective practice effectively. One major issue is limited time, as the busy schedules of both students and professionals in academic and clinical environments often leave little room for reflection. Additionally, a widespread lack of awareness and appreciation for the value of reflective practice—especially among preceptors and clinical nursing staff—poses a challenge, as the importance of nurturing a reflective culture is frequently underestimated or ignored. Additionally, the absence of structured supervision and guidance from clinical instructors and lecturers further exacerbates the issue, leaving students without the necessary support to develop and refine their reflective skills (Artioli et al., 2021; Gilheaney & Quigley, 2021; Karimi et al., 2017; Oluwatoyin, 2015).

The clinical learning environment, which is critical for learning and application, often lacks an established culture of reflection. Preceptors and staff may not model reflective behaviours, making it challenging for students to see its relevance or to integrate it into their own practices. Furthermore, limited access to mentorship and feedback diminishes the quality of reflection, reducing its value as a learning tool.

Assessing the experiences of reflective practice among undergraduate nursing and midwifery students is crucial for identifying these barriers and developing strategies to address them. By understanding the challenges that students face, educators and institutions may create targeted interventions to support reflective practice. These may include providing dedicated time for reflection, fostering a culture of reflection within clinical settings, offering training for preceptors and staff, and making sure that students are provided with regular and constructive feedback from clinical instructors. Overcoming these obstacles is crucial to unlocking the full potential of reflective practice as a powerful mechanism for fostering personal and professional growth in nursing and midwifery education.

In regions such as America, Australia, and Europe, the integration of reflection into the curriculums for nursing students is not just encouraged, but it is made a compulsory component. This mandate aims to foster the development of reflective abilities among student nurses, ensuring they can engage in continuous self-assessment and growth. As part of this educational approach, nursing students are required to maintain a reflective portfolio throughout their training. This portfolio acts as a resource for recording experiences, ideas, and learning journeys, supporting overall growth and strengthening reflective practice abilities. According to studies by Gilheaney & Quigley (2021); O'Brien & Graham (2020); Yu et al., (2019), this method has proven effective in enriching the educational journey of nursing students, helping them to critically analyse their practice and improve patient care.

However, the practice of incorporating reflection into nursing curriculums has not been as widely adopted in other parts of the world. For instance, in China, reflective practices are not commonly embedded within the nursing education system, as highlighted by Yu et al., (2019). This situation mirrors the educational approaches in many Sub-Saharan African countries, including Malawi. In these regions, the concept of maintaining a reflective portfolio and the broader practice of structured reflection within nursing education have not been introduced extensively. This presents a significant contrast to the approaches observed in Western

countries and it raises important questions about the potential benefits that could be gained by adopting similar reflective practices in nursing curriculums worldwide.

Currently, Nurses and Midwives Council of Malawi (NMCM) advocates for and encourages nurses and midwives to engage in reflective practices to enhance and refine their professional approaches, similar to the initiatives undertaken by nursing and midwifery boards globally. Nursing and midwifery teaching institutions in Malawi are encouraged to incorporate a module on reflection in their curriculums. However, there is no module on reflection in undergraduate nursing and midwifery curriculums at Mzuzu University and Daeyang Universities. Anecdotal evidence indicates that Mzuzu University prepares their undergraduate nursing and midwifery students for reflective practice. Students undergo theoretical preparation during their first year of study before commencing clinical practice. Additionally, they document a reflective account of their experiences at the conclusion of each clinical placement. Similarly, Daeyang University prepares their undergraduate nursing and midwifery students for reflective practice despite non-inclusion of a reflection module in the curriculum. However, reflective practice is encouraged and promoted throughout their clinical placements. Research on reflective practice remains limited at Mzuzu University and Daeyang University, as well as across Malawi as a whole.

1.2 Statement of the Problem

Extensive literature underscores that reflective practice is one of the most highly regarded theories in professional knowledge and practice, widely recognised and adopted globally (Noora Ahmed et al., 2024; Barbagallo, 2020; Donohoe et al., 2022). Reflective practice has been widely adopted as a key educational approach in nursing and midwifery training in numerous countries. Scholars and educationists advocate for the inclusion of dedicated modules on reflection in nursing and midwifery curricula to prepare nurses and midwives who are proficient in reflective practice (Artioli et al., 2021; Bijani et al., 2021; Contreras et al., 2020; Marshall et al., 2022; Shin et al., 2023).

Although this global trend is evident, reflective modules are notably lacking in the undergraduate nursing and midwifery programmes at Mzuzu University and Daeyang University in Malawi. Anecdotal observations suggest that while students at these institutions are introduced to theoretical aspects of reflection from their first year and practice it, they do so without formalised curricular support. According to the Nursing and Midwifery Council of

Malawi (NMCM, 2013), students spend approximately sixty percent (60%) of their study time in clinical settings, integrating theoretical knowledge with practical experience. During these clinical placements, students are encouraged to engage in reflective practices to navigate real-life clinical situations that may differ significantly from classroom teachings (Mcloughen et al., 2020).

By the culmination of their undergraduate studies, nursing and midwifery students are expected to exhibit well-developed reflective abilities, encompassing both reflection-in-action and reflection-on-action, a process that is inherently complex and cognitively demanding (McCarthy et al., 2021).

In addition to the challenges faced by students, the shortage of nursing and midwifery faculty necessitates that qualified practicing nurses and midwives take on roles in clinical teaching (Bvumbwe & Mtshali, 2018; Phuma-Ngaiyaye et al., 2017). However, it remains unclear whether these practitioners engage in reflective practices themselves and how effectively they support and guide undergraduate students in developing such skills during clinical rotations.

Moreover, there is limited research on reflective practice within the realm of nursing and midwifery education in Malawi, especially at these two universities. This lack of studies underscores the importance of conducting empirical research into the experiences of final year undergraduate nursing and midwifery students with reflective practice at these institutions.

1.3 Broad Objective

To assess the experiences of final year undergraduate nursing and midwifery students regarding reflective practice at Mzuzu University and Daeyang University.

1.4 Specific Objectives

1. To assess knowledge of Mzuzu and Daeyang Universities' final year undergraduate nursing and midwifery students on reflective practice;
2. To explore practices of final year undergraduate nursing and midwifery students at Mzuzu and Daeyang Universities regarding reflective practice;
3. To determine the barriers the final year undergraduate nursing and midwifery students at Mzuzu and Daeyang Universities face regarding reflective practice; and

4. To describe the support regarding reflective practice that qualified practicing nurses provide to undergraduate nursing and midwifery students during clinical practice.

1.5 Research Questions

1. What knowledge do final year undergraduate nursing and midwifery students at Mzuzu and Daeyang Universities have regarding reflective practice?
2. What practices do final year undergraduate nursing and midwifery students at Mzuzu and Daeyang universities engage in regarding reflective practice?
3. What barriers do final year undergraduate nursing and midwifery students at Mzuzu and Daeyang Universities face regarding reflective practice?
4. What support do qualified practicing nurses provide to undergraduate nursing and midwifery students regarding reflective practice?

1.6 Significance of the Study

Reflection plays a vital role in nursing education, serving as a cornerstone for developing critical thinking abilities. This study, which assesses the reflective practice experiences of final year undergraduate nursing and midwifery students, holds significant importance. Reflective practice is deeply embedded in the education and training of nurses, especially in clinical settings, and is essential for their professional growth and future practice.

Assessing reflective practice experiences of final year undergraduate nursing and midwifery students greatly enrich the existing knowledge on this topic. The results offer valuable perspectives that can strengthen reflective practices for both current students and practicing nurses and midwives. Enhanced reflection, driven by these insights, is expected to improve patient care quality and lead to better health outcomes.

Moreover, acquiring deeper insights into the reflective practice experiences of final-year undergraduate students can improve clinical teaching and supervision in nursing and midwifery education. Such understanding will aid in developing more efficient educational approaches, equipping students to better navigate the challenges of clinical practice.

Furthermore, the results of this study serve to inform and promote the inclusion of a dedicated module on reflection and reflective practice within nursing curricula. This provides administrators of nursing institutions with the evidence needed to advocate for curricular changes that emphasise the importance of reflection in nursing education. Additionally, the study will lay the groundwork for future research, offering a foundation upon which subsequent studies can build to further explore and develop the practice of reflection in nursing and midwifery education in Malawi.

This study has also identified specific barriers and facilitators of effective reflective practice. By understanding these factors, educational institutions can develop targeted interventions to overcome obstacles and support students in developing their reflective abilities. This knowledge can inform the design of professional development programmes for educators and clinical supervisors, ensuring they are equipped to foster a reflective culture within their teaching and practice environments.

The findings from this study support the creation of assessment tools and metrics to measure the impact of reflective practice in nursing education. These resources can aid in tracking student development, offering constructive feedback, and refining teaching strategies.

The significance of this study extends beyond the academic realm. By promoting reflective practice, the study can indirectly contribute to the professional growth of nurses and midwives. Reflective practitioners would be better equipped to handle complex clinical situations, make informed decisions, and engage in lifelong learning. This would not only enhance their professional competence but it would also boost their confidence and job satisfaction.

The study's outcomes have the potential to create a profound impact on the healthcare system. By cultivating nurses and midwives skilled in reflective practice, the standard of patient care can be greatly enhanced. Thoughtful and self-aware practitioners dedicated to ongoing improvement contribute to better health outcomes, higher patient satisfaction, and a stronger, more efficient healthcare workforce.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

A literature review is an essential process that helps researchers compile a detailed written summary of the existing knowledge related to their research topic (Machi & McEnvoy, 2016). According to Polit & Beck (2018), the literature review plays a crucial role in understanding what has already been discovered and documented in a particular field of study. It provides a foundation upon which new research can be built, ensuring that researchers are not duplicating efforts and are instead contributing novel insights to the academic community.

Machi & McEvoy (2016) defined a literature review as “a written document that presents a logically argued case founded on a comprehensive understanding of the current state of knowledge about a topic of study” (p. 28). This definition emphasizes the significance of a literature review in creating a cohesive narrative that integrates existing studies, pinpoints gaps in current knowledge, and identifies areas requiring further exploration.

To obtain the latest and most pertinent information on reflection and reflective practice, an extensive literature search was performed across multiple electronic databases. These included Google Scholar, PubMed, ResearchGate, HINARI, MEDLINE, Francis and Taylor, and ScienceDirect. Utilizing these platforms allowed the researcher to access a diverse collection of peer-reviewed articles, academic publications, and scholarly papers.

The literature search employed specific search terms such as "Reflection," "Reflective Practice," "Reflection Knowledge," "Nursing Students," "Enablers and Barriers of Reflection," and "Clinical Support." These terms were carefully selected to capture the broad spectrum of topics related to reflective practice in the context of nursing and midwifery education.

Chapter two presents an extensive review of literature on reflection and reflective practices, structured around the four defined study objectives. It situates the current research within the broader context of existing knowledge while offering valuable insights into the methodologies, findings, and theoretical frameworks utilized in prior studies. This detailed examination of the literature plays a key role in shaping the research design, refining research questions, and framing the analysis and interpretation of results.

By reviewing the literature, the researcher aims to create a well-informed backdrop against which the study's findings can be interpreted. This process not only adds rigour to the research but it also ensures that the study contributes meaningfully to the ongoing discourse on reflective practice in nursing and midwifery education.

2.1 Knowledge of Nursing Students on Reflective Practice

Reflection continues to grow in popularity due to its use as a fundamental tool for learning (Peixoto & Peixoto, 2016). This rising trend is largely attributed to the recognition of reflection as a powerful educational strategy that enhances both personal and professional development. The concept of reflection is usually introduced to students during their first semester in practice-related courses (Azmi et al., 2024; Donohoe et al., 2022; Graham & O'Brien, 2020; Weller-Newton & Drummond-Young, 2023). Introducing reflection early in their academic journey equips students with essential skills for their initial clinical placements, setting a strong foundation for their ongoing professional development.

According to Nukpezah et al., (2021), reflection is an important professional and personal development tool that yields positive patient care and outcomes, especially when it is practiced effectively. The process of reflection enables individuals to critically examine their professional practice through self-assessment, incorporating their experiences, thoughts, emotions, actions, and knowledge (Balabanova et al., 2021). Engaging in this self-assessment deepens one's comprehension of their practice and encourages ongoing growth and development.

In nursing context, which is inherently a practice-based profession, the necessity for constant reflection cannot be overstated. Nursing professionals are required to engage in continuous reflective practices to ensure they provide the highest quality of care to their patients (Mgbekem et al., 2016). Reflection aids in identifying areas of strength and weakness, allowing nurses to make well-informed decisions and adapt their approaches according to reflective insights.

In addition to supporting personal growth, reflective practice plays a key role in improving the overall quality of healthcare services. Through reflection, nursing students and practitioners can strengthen critical thinking, enhance clinical skills, and ensure their approaches are

grounded in evidence. This ultimately results in improved patient care and elevated standards within the healthcare system.

The systematic incorporation of reflection in nursing education also prepares students for the complex and dynamic nature of clinical environments. It encourages them to be mindful practitioners who are aware of their actions and their impact on patient care. Furthermore, engaging in reflective practice helps build resilience and professional identity among nursing students, enabling them to navigate the challenges of their profession with greater confidence and competence.

Reflective practice plays a vital role in the professional growth of healthcare practitioners, allowing them to thoroughly evaluate their actions and decisions to strengthen their clinical expertise and knowledge (Aziz et al., 2020; Contreras et al., 2020; Gaeeni et al., 2021; Pretorius & Ford, 2016). Consequently, the ability to reflect on experiences is a fundamental trait of effective healthcare professionals, aiding in the continuous improvement of their practice.

Critical reflection on experiences is pivotal in helping healthcare professionals identify and understand their personal beliefs, attitudes, and values. This introspective process facilitates the engagement in lifelong learning, which is crucial for maintaining clinical competence and adapting to the evolving demands of the healthcare environment (Adams, 2018; Austin et al., 2020; Ekelin et al., 2021; McCarthy et al., 2021; Miraglia & Asselin, 2015). Through reflecting on their experiences, healthcare professionals can identify areas needing improvement, gain new perspectives, and apply evidence-based practices to enhance patient care and achieve better outcomes.

Reflective practice aims to foster self-awareness, personal growth, and the enhancement of knowledge. By engaging in reflection, individuals can gain profound insights into their professional experiences, ultimately driving ongoing improvement both personally and professionally (Mahlanze et al., 2015). This process not only enhances their clinical expertise but also fosters resilience and emotional intelligence, which are essential attributes for handling the complexities and pressures of healthcare settings.

Researchers have advocated for the integration of reflective practice into nursing education, as it enables students to cultivate critical thinking and problem-solving abilities. Additionally, reflective practice supports students in coping with the emotional demands of the profession,

fostering mental health and reducing the risk of burnout (Contreras et al., 2020; Marshall et al., 2022; McLeod et al., 2020; Shin et al., 2023).

Incorporating reflective practice into the educational structure enables nursing programs to provide students with the skills required to handle the complexities of clinical practice successfully. This method not only equips students for the demands of the healthcare field but also fosters an ethos of ongoing growth and lifelong learning. Ultimately, embracing reflective practice in nursing education helps shape skilled, empathetic, and thoughtful healthcare professionals dedicated to offering exceptional patient care.

Nukpezah et al. (2021) conducted a quantitative descriptive cross-sectional study in Ghana to examine pediatric nursing students' knowledge, practices, and perceptions of the usefulness of reflective practice during the COVID-19 pandemic. The study focused on level 300 and 400 students at the University of Development Studies, Tamale, aged 17 to 38 years. Data collection involved a structured questionnaire administered electronically via Google Forms and disseminated through social media platforms, including the class WhatsApp group. Results revealed that 88.5% (54 out of 61) of participants were familiar with reflective practice. There was no significant correlation between respondents' age and their knowledge of reflection (Fisher's exact test = 5.18, P = 0.159). However, significant differences emerged regarding respondents' gender and knowledge of reflection (Fisher's exact test = 12.09, P = 0.001) as well as their academic level and knowledge of reflection (Fisher's exact test = 10.90, P = 0.004). These findings are consistent with those reported by Mgbekem et al. (2016).

Mgbekem et al. (2016) carried out a quantitative descriptive study aimed at assessing the awareness and implementation of reflective practice among nurses at the University of Calabar Teaching Hospital in Cross River State, Nigeria. The study involved 238 professional nurses, with data collected through self-administered questionnaires. Findings indicated that most of the nurses were knowledgeable about reflective practice. Despite variations in participant types and sample sizes, the results of this study aligned with those of similar research. The consistency in findings may be attributed to the geographical and socio-economic contexts, as both nations are situated in West Africa and are classified as Middle-Lower Income Countries.

Adams (2018) conducted a qualitative descriptive study in Stellenbosch, Western Cape Province (South Africa), involving third-year Baccalaureate Technologiae nursing students. The research focused on their use and implementation of reflection, with three focus group

discussions comprising 15 participants. The discussions were guided by a semi-structured interview framework to explore their experiences. Results showed that participants possessed a solid understanding of reflective practice, which they associated with both personal and professional growth. Despite variations in study design, participant education levels, and study settings, the findings were consistent with those of similar studies.

Studies conducted in Australia and Ireland (McLeod et al., 2019; O'Brien & Graham, 2020) also indicated similar results with the above studies despite differences in level of study participants education and disciplines, sample size, setting and socio-economic status. McLeod et al., (2019) conducted a descriptive survey to explore senior student Osteopath's experiences of reflective practice at Southern Cross University in Australia. 33 fourth- and fifth-year students participated in the study. The survey was administered using the online survey service hosted by Google forms. The results indicated a majority of students (n=24, 75%) to have a 'good' understanding of reflective practice with the remainder (n=8, 25%) rating their understanding of reflective practice as 'average'. The research also identified reflective practice as a key driver of both personal growth and professional advancement, according to the students' perspectives.

O'Brien and Graham (2020) carried out a study involving fourth-year pre-registration Bachelor of Science students in nursing and midwifery at an Irish university to examine their experiences with guided group reflection as a means of supporting personal and professional growth. Using a qualitative descriptive method and a sample of 101 participants, the study revealed that most students had a strong understanding of reflection. They also appreciated the reflective sessions in the closed group format, which contributed significantly to both their personal and professional development.

The alignment of results from research carried out in various countries, fields, and methodological approaches highlights the essential importance of reflective practice in healthcare education and the advancement of professional skills. Reflective practice facilitates self-awareness, critical thinking, and experiential learning, making it an indispensable component of educational curricula and professional training globally. The strong evidence base spanning multiple contexts and methodologies demonstrates that reflective practice is a universally recognized and valued approach, adaptable to diverse settings and disciplines.

2.2 Nursing Students' Practices of Reflective Practice

Studies emphasize that blending knowledge and practice leads to a richer comprehension, improves learning within clinical settings, and contributes to a more rewarding educational journey for students (Pretorius & Ford, 2016; Ticha & Fakude, 2015). Reflection is regarded as an essential and fundamental component of student learning, especially in healthcare education, and has become widely embraced in undergraduate programs (Donohoe et al., 2022; McCarthy et al., 2021; Weller-Newton & Drummond-Young, 2023).

As healthcare environments grow increasingly complex, it becomes clear that the nursing process alone might not fully prepare practitioners with the extensive knowledge and skills necessary for delivering exceptional patient care (Agyeman-Yeboah et al., 2017). Nonetheless, in many developing nations, such as Malawi, the nursing process remains a cornerstone for offering personalized and high-quality care (Mahlanze & Sibiya, 2017).

This highlights the urgent necessity of embedding reflective practice into regular nursing routines. By linking theoretical insights to practical application, reflective practice equips nurses to tackle varied challenges, refine their decision-making, and significantly elevate the standard of care provided to patients (Aziz et al., 2020). Through the cultivation of critical thinking and self-awareness, it facilitates the ongoing professional growth of healthcare workers, ensuring that patient care evolves in line with changing needs and healthcare benchmarks.

Reflection is a dynamic and intentional practice that demands specific attitudes, including open-mindedness, a sense of responsibility, and a willingness to engage with challenging issues while constructively acting on feedback or criticism (Azmi et al., 2024; Mgbekem et al., 2016; Scheel et al., 2021). It encompasses a continuous cycle of self-reflection and assessment, allowing individuals to enhance their comprehension and refine their approach.

Reflection can occur in two primary forms: reflection-in-action, which takes place during an activity and involves immediate adjustments based on real-time assessment, and reflection-on-action, which occurs after an event, allowing practitioners to critically analyse their actions and outcomes (Pretorius & Ford, 2016). Both types play an essential role in developing critical thinking and adaptive skills within professional practice.

For reflective practice to be effective, individuals must cultivate essential skills, such as self-awareness**,** the ability to describe experiences objectively, engage in critical analysis**,** and integrate information through synthesis and evaluation (Mgbekem et al., 2016). These competencies are not innate but are honed over time with consistent effort and intentionality.

McCarthy et al. (2021) described reflective practice as a multifaceted and intellectually challenging process that demands considerable time and commitment to achieve proficiency. Intricate nature of reflection, which involves analysing not just actions, but also emotions, motivations, and external influences, necessitates patience and persistence for practitioners to fully integrate it into their professional lives.

Reflective writing is a widely used method to foster critical reflection among students, enabling them to gain deeper insights into their clinical experiences. Gibbs' Reflective Cycle is a widely used framework that offers a structured method for engaging in reflection. Its stages—description, feelings, evaluation, analysis, conclusion, and action planning—guide students in thoroughly examining their clinical experiences, pinpointing areas for improvement, and formulating practical plans for future actions. This approach not only cultivates self-awareness but also reinforces reflective practices that are vital for professional growth.

According to O'Brien and Graham (2020), reflective practice in clinical settings is facilitated through various methods, each designed to support and encourage active engagement:

Peer Reflection and Group Discussions: These sessions foster a secure and nurturing space that encourages students to freely express their ideas, struggles, and achievements. Such collaborative reflections allow learners to benefit from diverse perspectives and learn from their peers' experiences. For instance, O'Brien and Graham's (2020) study found that guided group reflections significantly enhanced nursing students' confidence by fostering mutual understanding and collective problem-solving.

Reflective Portfolios: These portfolios serve as a comprehensive tool for tracking progress and fostering growth. They typically include reflective essays, case studies, and feedback from clinical instructors. Ticha & Fakude (2015) found that nursing students who maintained reflective portfolios were better able to monitor their learning journeys, set meaningful goals, and incorporate constructive feedback from nurse educators into their practice. The portfolios

function as both a record of personal development and a means to identify and address knowledge gaps.

Digital Tools for Reflection: Advances in technology have introduced innovative ways to engage in reflective practice. Digital tools such as blogs, e-portfolios, and mobile applications are becoming increasingly popular for documenting reflections. In developed countries, e-portfolios are frequently integrated into nursing programmes, allowing students to upload reflective entries, receive timely feedback from instructors, and track their growth over time. These tools provide flexibility and accessibility, enabling students to engage in reflection regardless of location or time constraints. By leveraging such platforms, students can participate in a dynamic and interactive learning process that aligns with modern educational practices.

Together, these approaches reinforce one another, fostering reflective habits that are crucial for both personal and professional development within clinical environments (O'Brien & Graham, 2020). By actively participating in reflective practices, students enhance their clinical skills while gaining a deeper insight into their roles, duties, and the effects of their actions on patient care.

Reljic et al. (2019) carried out a qualitative study to investigate nursing students' experiences with self-reflection during their initial clinical placements. Grounded in a naturalistic philosophical paradigm, the study utilised qualitative methodology and was carried out at a Slovenian university offering an undergraduate nursing programme. Data were collected from written self-reflection diary entries of 17 first-year nursing students between March and June 2016. The study demonstrated that self-reflection enabled students to express and analyze their emotions, revisit and recognise challenges, and achieve greater self-awareness. These findings highlight the vital importance of self-reflection in fostering emotional and cognitive development during early clinical experiences. These results are consistent with the results reported by Ticha & Fakude, 2015.

Ticha and Fakude (2015) conducted a study in the Western Cape, South Africa, examining the views of fourth-year undergraduate nursing students on reflective practice while developing their portfolios. Using an exploratory qualitative approach, the study involved three focus group discussions, with six to eight participants in each group. The results revealed that

reflective practice positively influenced students by boosting their self-esteem, confidence, and critical thinking abilities, significantly aiding both their personal and professional growth.

McCarthy et al. (2021) provided additional evidence supporting these advantages by examining the views of nursing and speech and language therapy students on using reflection as a clinical learning tool. The study, carried out at an Irish university, included 46 third- and fourth-year undergraduate students. Through a qualitative descriptive approach, the research highlighted the significant benefits reflection brought to both student groups. Participants noted that reflective practice supported their personal growth and professional clinical learning, emphasising its value as an essential educational tool in healthcare training.

Collectively, these studies emphasize the significance of reflective practice in various educational and clinical contexts. By encouraging emotional expression, critical thinking, and self-awareness, reflective practices empower students to handle the challenges of clinical settings and enhance their professional skills. The studies by Reljic et al., (2019), the South African study on fourth-year nursing students, and McCarthy et al., (2021) collectively present a compelling argument for the critical role of reflective practice in healthcare education. These studies demonstrate that reflective practice transcends theoretical learning, enabling students to integrate experiential insights, enhance self-awareness, and build essential professional competencies.

The cumulative findings from these studies provide compelling scientific support for integrating reflective practices as a fundamental element of healthcare education. By actively nurturing emotional resilience, critical thinking, and professional skills, reflective practice effectively connects theoretical understanding with practical application. Moreover, its versatility across various fields and settings highlights its essential role in equipping students to address the evolving complexities of healthcare environments. Thus, reflective practice should be regarded not as a supplemental activity but as a fundamental element of healthcare training, ensuring the development of well-rounded, reflective practitioners capable of delivering high-quality patient care.

The evidence from literature highlights that numerous professions, including nursing and midwifery, emphasize the importance of reflective practices. Research conducted in various contexts shows active participation of nursing and midwifery students in such practices. For example, Pretorius and Ford (2016) conducted a mixed-methods study at Monash University

in Australia, investigating nursing students' reflective processes through self-discovery facilitated by peer discussions. Participants, comprising first-year students in the Transition 2 University (T2U) program, demonstrated the ability to engage in reflective practices after being introduced to foundational frameworks early in their studies. These findings align with those from a descriptive qualitative study by Adams (2018), conducted in Stellenbosch, Western Cape Province, South Africa. This research involved third-year baccalaureate nursing students and explored their application of reflective practices, revealing that participants utilized various forms of reflection after receiving foundational preparation in their first year of study.

Research shows that reflective practice can be successfully implemented during the initial phases of professional education. Pretorius and Ford (2016) conducted a mixed-methods study at Monash University in Australia to investigate the experiences of first-year nursing students engaging in reflective practice through the Transition 2 University (T2U) programme. The study found that students readily embraced reflective practice early in their education, aided by structured frameworks and peer collaboration. These findings underscore the value of introducing fundamental reflective skills early in educational curricula to promote self-awareness and critical thinking from the start.

Similarly, Adams (2018) conducted a descriptive qualitative study in Western Cape Province, South Africa, focusing on third-year baccalaureate nursing students' engagement with reflective practice. The findings indicated that these students applied various forms of reflection after being introduced to reflective frameworks during their first year. This progression highlights the enduring advantages of initiating reflective practice at an early stage and consistently enhancing it throughout the course of the educational experience.

The studies from Australia and South Africa show strikingly similar findings despite differences in geographical and cultural contexts. Both studies highlight that reflective practice becomes more meaningful and effective when supported by structured educational interventions. This universality suggests that reflection is not context-dependent but a transferable skill relevant to diverse healthcare settings. It further reinforces the case for establishing reflective practice as a universal element in nursing and midwifery education worldwide.

The study by Pretorius & Ford, (2016) emphasised the role of self-discovery in reflective practice, enhanced by peer discussions. Such collaborative methods allow students to articulate their experiences, gain insights from their peers, and develop critical perspectives. Reflection

supported by peers offers a secure space for students to delve into their obstacles and achievements, boosting both their emotional and intellectual involvement in clinical practice. This aligns with Adams' (2018) findings, where students reported engaging in reflective practices that facilitated deeper understanding and application of their learning.

The findings from Pretorius and Ford (2016) and Adams (2018) underscore the impactful role of reflective practice in nursing and midwifery education. Early and continuous involvement in reflective activities helps students develop critical thinking abilities, emotional strength, and professional expertise. These results highlight the importance of adopting universally standardised educational approaches that position reflection as a core element. By promoting self-awareness and fostering critical engagement, reflective practice ensures that nursing and midwifery professionals are well-equipped to handle the evolving and complex challenges of healthcare settings.

2.3 Barriers of Reflective Practice

The process of reflection, while widely acknowledged as valuable, is often perceived by students as a challenging and unnatural endeavour. According to Karimi et al., (2017), students view reflection as a laborious process that demands effort, intention, and a conducive environment. They emphasise that reflection thrives in safe, supportive, and confidence-building settings, highlighting the need for educational systems to create environments where students feel secure and encouraged to engage in reflective practices.

Artioli et al. (2021) conducted a systematic review and qualitative meta-synthesis to investigate how healthcare professionals and students utilized reflective writing during their education and training. The findings identified several barriers to the use of reflective writing, including time constraints, difficulty in articulating reflections, concerns about privacy, and feelings of boredom or coercion. These factors illustrate the practical and emotional challenges faced by learners, which can hinder their willingness to engage deeply in reflection. However, the review had a geographical limitation, focusing exclusively on studies conducted in Western countries, which omits perspectives from regions such as Africa and Asia. This lack of diversity in the data limits the generalisability of the findings, as cultural and contextual factors may significantly influence perceptions of reflective writing.

Likewise, Barbagallo (2020) conducted a qualitative meta-synthesis to examine nursing students' views on reflective practice, encompassing both undergraduate and graduate students

at different stages of their academic programs. The study identified barriers similar to those reported by Artioli et al., (2021), including negative experiences, insufficient time, lack of institutional and educator support, and the perception of reflective practice as burdensome. The findings from Artioli et al., (2021) mirrored those of Barbagallo, (2020), likely due to the shared geographical focus on European contexts.

Both meta-syntheses emphasize that reflection does not occur naturally but is a structured process that requires intentional support. Time constraints and lack of preparation stand out as universal barriers. For reflection to be effective, students need dedicated time and resources, as well as institutional support to guide them in mastering this skill. The findings call for educational institutions to redesign curricula to allocate specific time for reflection and to provide the necessary tools and training for effective implementation.

The geographical limitation of both studies—focusing exclusively on Western contexts—presents a significant gap in understanding how cultural differences might influence perceptions of reflection. In many non-Western contexts, factors such as hierarchical educational systems, limited resources, and differing cultural attitudes toward self-expression and criticism could uniquely shape students' engagement with reflective practice. Addressing this gap through inclusive research would provide a holistic perspective on the challenges and facilitators of reflection globally.

Undergraduate nursing and midwifery students participate in reflective practice within clinical learning settings, facing a variety of situations that require careful analysis and meaningful reflection. However, several obstacles in the clinical learning environment can hinder their ability to fully engage in effective reflective practices, consequently affecting their overall educational experience and professional growth.

Panda et al., (2021) conducted a qualitative systematic review aimed at providing deeper insight into these challenges by synthesising findings from multiple studies. This review explored the perspectives of student nurses and midwives, clinical instructors, and practising clinical nurses and midwives regarding the obstacles students face in the clinical learning environment. The findings revealed that the attitudes of clinical staff, instructors, and other key stakeholders play a pivotal role in shaping students' clinical learning experiences. Negative attitudes or unwelcoming behaviours from these groups were highlighted as significant barriers to effective learning.

Furthermore, the lack of a sense of belonging, diminished self-motivation, and the pervasive fear of making errors emerged as psychological and emotional obstacles hindering students' capacity to learn and reflect. Environmental and systemic factors also contributed to these challenges. Resource shortages, staff deficits, and high workloads within clinical settings were reported as additional impediments, creating a less-than-ideal atmosphere for student learning and development.

These results align with earlier studies by Artioli et al. (2021) and Barbagallo (2020), which also highlighted the negative influence of environmental and interpersonal factors on students' clinical learning experiences. Together, these findings stress the importance of tackling the obstacles encountered by students in clinical practice. By identifying and addressing these challenges, educators, clinical staff, and healthcare organizations can create a supportive clinical learning environment that encourages reflective practice. Such initiatives are crucial for cultivating skilled, self-assured, and reflective nurses and midwives who are well-prepared to deliver exceptional patient care.

2.4 Clinical Supervision and Support

Clinical supervision is a well-organized approach to professional guidance, clinical instruction, and hands-on learning aimed at helping students enhance their abilities, knowledge, and practice through regular, focused conversations and reflective interactions (Rothwell et al., 2021). It provides a supportive setting for fostering both personal and professional development, enabling students to evaluate their clinical experiences, gain valuable insights, and strengthen their skills (McLoughen et al., 2020).

The significance of clinical supervision extends beyond technical skill acquisition; it also plays a crucial role in fostering students' emotional resilience, critical thinking, and ethical decision-making (Martin et al., 2022). According to Zhang et al., (2022)**,** clinical supervision does not only enhance students' professional development, but it also builds a supportive relationship and strong working alliance between students and their supervisors. This dynamic fosters transparent dialogue, shared trust, and productive feedback, all of which are crucial for establishing a supportive and enriching educational atmosphere.

Rothwell et al. (2021) highlight that the success of students in clinical practice is strongly influenced by the continuous support they receive in their training environments. This support

is crucial in helping students build the skills and confidence necessary to manage the challenges of clinical settings. Reflective practice, an integral component of professional development in healthcare, develops gradually and depends on the availability of appropriate tools, resources, and consistent mentorship for effective implementation.

The effective integration of theory and practice thrives in clinical settings that cultivate a supportive and encouraging atmosphere. Zhang et al. (2022) emphasize that such environments enable students to bridge the gap between classroom-acquired theoretical knowledge and its practical application in real-world scenarios. This harmonious integration not only improves educational outcomes but also deepens students' comprehension of their responsibilities as healthcare professionals.

To achieve this, students need structured support and supervision throughout their clinical placements. Bvumbwe et al., (2015) emphasise the importance of tailored support systems and supervisory frameworks to help students engage in reflective practice effectively. This support becomes especially vital during clinical placements, where students encounter new obstacles and must rapidly adjust to the dynamic and challenging nature of healthcare settings.

However, the effectiveness of clinical support hinges significantly on the ability of supervisors to facilitate meaningful reflection. Gordon, (2019) argue that supervisors play a pivotal role in guiding students through reflective processes, enabling them to critically evaluate their experiences, identify areas for improvement, and solidify their learning. Supervisors with effective facilitation abilities can guide students to move past superficial reflections, enabling them to gain more profound understanding and insights into their clinical experiences.

In summary, clinical supervision serves as a fundamental pillar of effective nursing and healthcare education. By offering a structured approach to guidance, reflection, and feedback, it not only enhances students' clinical skills but also strengthens their ability to engage in ethical and reflective practices. This highlights the critical need to incorporate robust clinical supervision frameworks into nursing education to better equip students for the demands of contemporary healthcare settings. Reflective practice, however, is not an automatic process; it requires deliberate effort, suitable resources, and expert supervision to be cultivated effectively. Supportive clinical environments and strong supervisory systems play a vital role in bridging the gap between theoretical learning and practical application, nurturing students' development into skilled, self-assured, and reflective healthcare professionals.

In Malawi, nursing education emphasises collaboration between qualified practicing nurses and nurse educators to enhance nursing students' learning experiences and facilitate the acquisition of essential skills, including reflective practice (Phuma-Ngaiyaye et al., 2017). Although this expectation exists, the main duty of qualified practicing nurses is to deliver nursing and midwifery care. Evidence suggests that this focus often overshadows their teaching role, as staff shortages, heavy workloads, and the perception of teaching as an added responsibility limit their capacity to support students effectively (Mhango et al.,2021).

Mhango (2021) emphasises that this disparity leads to students having limited chances and inadequate time to participate in reflective practice. Teaching is often conducted in a rushed manner, leaving little room for meaningful learning or critical reflection. Moreover, ineffective clinical support and supervision have been reported, stemming from poor collaboration between practicing nurses and academic staff (Bvumbwe et al., 2015). This lack of coordination leads to gaps in the clinical learning environment, where the dual demands of delivering care and facilitating teaching are not effectively balanced.

In many cases, the responsibility for clinical teaching and supervision falls predominantly on qualified practicing nurses, with faculty staff primarily focusing on student evaluations (Kaphagawani, 2015). This delegation of teaching responsibilities to practicing nurses places an additional burden on them, particularly when they are expected to facilitate the integration of theoretical knowledge into clinical practice. While qualified nurses have significant clinical expertise, their ability to fulfill the educator role is often constrained by systemic and educational limitations.

According to Mhango, (2021), a substantial number of preceptors (qualified nurses) in Malawi lack critical thinking and reflective practice skills. Many of these nurses have been in the profession for an extended period, during which systematic training on reflection and critical thinking was not integrated into their basic nursing education. This gap in training affects their ability to mentor students effectively in reflective practice, which is crucial for developing competent, thoughtful, and adaptive healthcare professionals.

Addressing these challenges requires a multifaceted approach, including enhancing collaboration between educators and clinical staff, reducing workloads for practicing nurses, and incorporating reflective practice training into nursing education at all levels. Empowering nurses with the skills and resources to balance care provision with teaching responsibilities is

essential to ensure the development of competent, reflective practitioners who can meet the demands of modern healthcare.

Nelumbu (2013) carried out a qualitative, explorative, descriptive, phenomenological, and contextual study at the University of Namibia to investigate how registered nurses in training hospitals in Windhoek practiced and understood reflection. The research sought to gain a deeper insight into nurses' views on reflective practice and its impact on their professional roles, particularly within clinical environments. The study revealed notable deficiencies in the knowledge and implementation of reflective practice among registered nurses. Many participants exhibited a limited or inadequate understanding of reflective practice, resulting in a lack of engagement in reflective processes to critically assess their experiences or actions in the workplace.

The lack of knowledge and engagement in reflective practice among nurses has serious implications for their role as mentors and supervisors for nursing students during clinical placements. Without a foundational understanding of reflective practice, nurses are less equipped to guide students in critical reflection, a process that is crucial for linking theoretical knowledge with practical application and for fostering professional growth. Consequently, this deficiency in reflective practice can lead to inadequate clinical support and supervision for students, ultimately hindering their ability to develop critical thinking skills, self-awareness, and a reflective approach to their practice.

These findings emphasise the need to evaluate the effectiveness of the support and mentorship provided to student nurses during clinical placements, especially in relation to encouraging reflective practices. It also underscores the need for interventions, such as professional development programs, to enhance the reflective practice capabilities of registered nurses. Enhancing nurses' understanding and use of reflection enables healthcare institutions to improve the clinical learning environment, providing students with the necessary support to build the skills required to become effective and reflective professionals.

Kamphinda and Chilemba (2019) conducted a mixed-methods study in Malawi to examine clinical supervision from the perspectives of undergraduate nursing students, focusing on their actual and desired clinical learning environments. The research included third- and fourth-year undergraduate nursing students, offering a detailed insight into their experiences. The results indicated widespread dissatisfaction among participants regarding the clinical supervision and

support they received during their placements. Students strongly advocated for enhanced clinical supervision and support to improve their learning experiences. These findings highlight the need to evaluate the quality and extent of support provided by practicing nurses, particularly in promoting reflective practice as a vital aspect of professional growth.

In a similar vein, Bvumbwe et al. (2015) carried out a qualitative study in Malawi to examine the experiences of practicing nurses within the clinical teaching environment. Employing a descriptive phenomenological method, the research identified various challenges encountered by nurses in their teaching roles. These included insufficient support from faculty staff, an inadequately organised clinical teaching environment, a lack of competence among certain practicing nurses, and unfavorable working conditions. Such obstacles hinder nurses' capacity to deliver effective supervision and mentorship to students during clinical placements.

The findings from both studies highlight the need for systemic changes to improve clinical learning environments. Practicing nurses, who work both as care providers and student supervisors, require substantial support from academic faculty, hospital management, and policymakers. Faculty staff need to actively collaborate with clinical nurses, not only to share the responsibility of student supervision but also to provide ongoing mentorship and training in reflective practice.

Considering these challenges, it is essential to assess the nature and quality of support that practicing nurses offer to undergraduate nursing and midwifery students, especially in promoting reflective practice. Tackling these issues will aid in narrowing the gap between theoretical knowledge and practical application, enhancing the clinical learning environment, and ensuring that students cultivate the critical thinking and reflective abilities required for success in their professional roles.

2.5 Conclusion

Reflective practice is a key educational approach, especially within nursing and midwifery programs, as it plays a fundamental role in preparing students to tackle the challenges of modern healthcare. Research highlights its significance in promoting both personal and professional growth, enhancing patient care quality, and achieving improved care outcomes. Additionally, reflective practice supports the advancement of knowledge and the development of essential clinical skills, making it a vital element of nursing and midwifery education. Thus,

integrating reflective practice into undergraduate curricula is crucial for equipping future healthcare professionals with the abilities required to provide excellent, patient-focused care.

The reviewed studies demonstrated that nursing students can successfully engage in reflective practice when provided with the appropriate conditions and support. Mentor support emerged as a critical factor in this process. Effective mentorship requires the provision of adequate time, a safe and non-judgmental environment, and proper guidance to facilitate meaningful reflection. Furthermore, for mentors to offer optimal support, they themselves must receive training and guidance in reflective practice and student mentorship.

While the value of reflective practice is well-documented, a notable gap exists in the geographical, institutional contexts, methodological scope and analysis techniques of the current literature. Most studies reviewed originated from developed countries, with only a limited number conducted in middle- and low-income countries where reflective practices are less structured. Reflective practice in developed settings often benefits from resources like structured modules and experienced clinical instructors. In contrast, developing contexts frequently face challenges like faculty shortages and limited resources, as highlighted for Malawi.

Additionally, the majority of these studies employed either meta-analysis, qualitative or quantitative methods in isolation, which may limit the depth and breadth of insights obtained. Some studies employed qualitative techniques like interviews and thematic analyses, emphasizing depth of insight, while others used quantitative surveys to capture broader trends. Mixed-methods designs, such as this study, merge these approaches for richer data. This brings up questions about how applicable the findings are across various educational and clinical settings.

Further, across the studies, common findings include the recognition of reflective practice as essential for professional growth and patient care improvement. However, some studies emphasize external barriers like lack of support from supervisors, while others highlight internal challenges, such as students' lack of motivation or understanding of reflective practice.

Moreover, all studies underline the need for structured interventions to enhance reflective practice, like integrating reflection modules into nursing curricula. While some studies provide

specific recommendations, such as fostering mentorship programs, others focus more broadly on addressing systemic challenges like workload and resource constraints.

These differences could stem from several factors such as: study context, variations in methodological approaches, variations in analytical tools and focus areas.

2.6 Theoretical Framework

This study utilized The Theory of Reflective Practice in Nursing by Galutira (2018), a middle-range theory deeply rooted in interpretive and phenomenological philosophy. The theory encompasses key concepts such as reflection, clinical situations or experiences, facilitating factors, obstructing factors, and outcomes, all of which are situated within a context referred to as the 'environment'.

Reflection: Entails an in-depth examination of a clinical event or scenario, involving the evaluation of personal emotions, thoughts, actions, or behaviours.

Clinical situation or experience: Refers to an event involving an individual patient, family, group, or community alongside the nurse or student, providing an opportunity to learn or resolve a clinical issue.

Promoting factors: Aspects that support nurses or students in engaging in reflection. These include well-developed cognitive abilities, adequate theoretical knowledge, a positive mindset, commitment of time, and a nurturing workplace culture.

Hindering factors: Aspects that obstruct reflective practices among nurses or students. These consist of underdeveloped cognitive skills, insufficient theoretical knowledge, negative attitudes, lack of time dedication, and an unsupportive workplace environment.

Outcomes: Positive impacts of reflection, such as personal and professional development, enhanced patient care quality, and improved care outcomes.

Environment: Denotes the setting in which conditions and events involving the patient and the nurse or student take place.

Figure 2.1 below, is the theoretical framework of reflective practice in nursing.

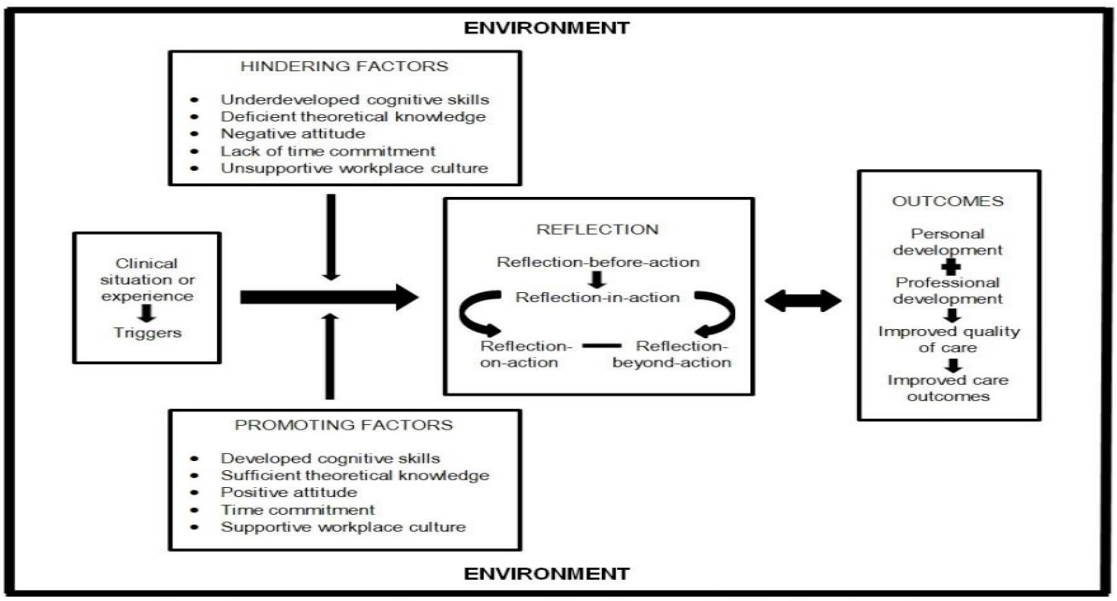


Figure 2.1: Theoretical Framework of Reflective Practice in Nursing

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents the methods employed to assess the reflective practice experiences among final-year undergraduate nursing and midwifery students at Mzuzu University and Daeyang University. It provides a summary of the study design, the research setting and target population, the data collection techniques, the process of data analysis, ethical considerations, and the study's limitations.

3.1 Research Approach and Design

This study employed a mixed-method research approach (MMR), specifically utilizing a convergent concurrent triangulation design. Mixed methods research systematically integrates qualitative and quantitative approaches within a single study to provide deeper and more nuanced understanding of complex research problems. This approach is particularly valued for its ability to combine the strengths of both paradigms, ensuring a holistic analysis (Hassan,2024).

In a convergent concurrent triangulation design, data collection for qualitative and quantitative strands occur simultaneously. The data are then analysed separately, with the results merged for comparison and interpretation (Creswell & Plano Clark, 2018). This design emphasises the identification of similarities and differences between the two data strands, with the primary goal of achieving complementary insights. By doing so, the weaknesses of using either a purely qualitative or quantitative approach are minimised, and the strengths of both approaches are leveraged (Polit & Beck, 2018).

The study employed a phenomenological qualitative approach to explore the lived experiences of final-year undergraduate nursing and midwifery students. This method was selected to delve deeply into the realities and truths embedded in the participants' experiences (Polit & Beck, 2018). On the quantitative side, a survey was conducted to evaluate trends, preferences, and other measurable elements related to the research questions. By combining these methods, the study comprehensively addressed the research questions from various perspectives.

3.2 Study Site

The study was conducted at the Mzuzu University Department of Nursing and Midwifery and the Daeyang University College of Nursing and Midwifery. These institutions were purposefully selected because they prepare their nursing and midwifery undergraduate students for reflective practice training from the first year of study, making them ideal settings for exploring students' experiences in reflective practice.

Mzuzu University

Mzuzu University (MZUNI), a public institution in Malawi situated in the city of Mzuzu in the Northern Region, encompasses multiple faculties, including the Faculty of Health Sciences. Within this faculty, the Department of Nursing and Midwifery provides a comprehensive four-year generic undergraduate nursing and midwifery programme. Reflective practice is embedded as a core component of this programme, designed to equip students with the skills needed to navigate the challenges of clinical practice effectively.

Daeyang University

Daeyang University College of Nursing and Midwifery, a Christian institution affiliated with the Christian Health Association of Malawi (CHAM), was founded by the Miracle for Africa Foundation. Situated in Lilongwe, Malawi's Central Region, the university offers both health-related and non-health-related programs. The College of Nursing and Midwifery delivers a four-year Bachelor’s Degree in Nursing and Midwifery that integrates theoretical learning with practical skills, including reflective practice. Guided by its faith-based mission, the institution prioritises holistic education, combining academic excellence with ethical and compassionate care.

Both institutions play a vital role in strengthening Malawi's healthcare system by educating future nurses and midwives to address the demands of contemporary healthcare. Their participation in this study offers important perspectives on the impact of reflective practice training in equipping students for their professional responsibilities.

3.3 Study Population

The study population comprised all final-year undergraduate nursing and midwifery students enrolled at Mzuzu University and Daeyang University. This population included both male and female students, reflecting the natural gender composition of these academic institutions. The final-year cohort was intentionally selected as the target population because reflective practice is a complex, cognitive process that requires time and experience to develop effectively (McCarthy et al., 2021). By their final year, students are expected to have gained substantial exposure to reflective practice, having been introduced to it in their first year and practiced it throughout their academic journey. This prolonged engagement would enable them to provide richer, more insightful experiences and perspectives on the phenomenon compared to their junior peers.

The total study population (N) consisted of 136 students, with 67 from Mzuzu University and 69 from Daeyang University. These students were selected due to their advanced progress in the programme, which enables them to effectively analyze and express their experiences with reflective practice, especially in relation to connecting theoretical knowledge to its practical application in clinical settings. This selection ensures the collection of comprehensive data, capturing a wide range of reflections and insights about the practice, its challenges, and its perceived value in nursing and midwifery education. Through focusing on this group, the study aimed to generate findings that could inform strategies to enhance reflective practice for future cohorts.

3.4 Sampling Technique and Sample Size Calculation

3.4.1 Sampling technique

Parallel and random sampling techniques were employed, where distinct groups of individuals were selected from the study population to provide data for the qualitative and quantitative components of the research (Creswell & Plano Clark, 2018). This method ensured independence between the two data forms while incorporating diverse perspectives, as emphasised by Creswell & Plano Clark, (2018). By using different participants for qualitative and quantitative sampling, the study minimized potential biases and enriched the overall findings by including a broad spectrum of experiences and viewpoints.

Simple random sampling technique was employed to sample participants for both quantitative and qualitative approaches. This technique allowed each individual in the population to have an equal chance of being selected. Simple random sampling technique was also chosen because all students in their final year were expected to have substantial exposure to reflective practice thereby having valuable information related to the study. The combination of parallel and simple random sampling techniques provided a robust and inclusive dataset for both qualitative and quantitative analysis, ensuring a rich and reliable exploration of the research objectives.

3.4.2 Sample Size

For the quantitative component, Slovin's formula was used to calculated sample size from the study population. Slovin's Formula: n=N/ (1+Ne^2) where n=sample size, N=total population and e= error of tolerance. A margin of error of 0.05 was used for an acceptable precision and the sample size was calculated as follows: n=136/ (1+136*0.05*0.05) = 101. Therefore, 101 participants were required for the survey from both sites.

To determine sample size for each study site from the 101 calculated sample above, a proportional formula was used. This ensured a representation sample for each stratum. Proportional formula; ni = Ni/N*n was used where ni = proportional sample size, Ni = study site population, N = total study population and n= total survey sample size. For MZUNI, the following survey sample size was adequate; ni = 67/136*101=50. An adequate survey sample size for Daeyang was ni = 69/132*99=51.

In phenomenological studies, a small number of participants is required as suggested by Polit & Beck (2018). In this study, the sample size was determined by reaching data saturation, which occurred when no additional themes, insights, or information surfaced, and repetition became evident. According to Polit & Beck (2018), phenomenological studies rely on very small samples-often 10 or fewer provided they experienced the phenomenon. To meet the study's objectives, the researcher sampled 12 participants for FGD (six participants at each site). This ensured a manageable size that allowed for in-depth exploration of the participants' lived experiences while maintaining a diverse range of insights.

3.5 Inclusion and Exclusion Criteria

Inclusion Criteria: The study included participants who were final-year undergraduate nursing and midwifery students enrolled in the generic nursing programmes at Mzuzu University and Daeyang University. These students were chosen because they were at a crucial stage in their education, having had substantial exposure to both theoretical and clinical training. This position allowed them to provide in-depth insights into their experiences with reflective practice, making them suitable subjects for the research.

Exclusion Criteria: Final year undergraduate nursing and midwifery students that are not generic at Mzuzu University and Daeyang University were excluded from the study. This included students from other years of study, as well as those enrolled in other nursing programmes such as Upgrading and postgraduate courses. The exclusion was essential to concentrate on the unique experiences and reflections of final-year students, guaranteeing that the data obtained was both pertinent and directly aligned with the study's aims.

3.6 Data Collection Methods

3.6.1 Data collection, Tools and Procedure

The study's data collection took place between July and September 2023 and included two focus group discussions (FGDs), each consisting of six participants, with one discussion held at each study setting. This method allowed the researcher to delve deeper by asking follow-up questions when needed and to interpret participants' non-verbal cues, ensuring the reliability and genuineness of the responses.

Phenomenological studies often rely on in-depth conversations as the main data source, which allows researchers to gain access to the informants' world and experiences (Polit & Beck, 2018). To guide the FGDs, the researcher developed a semi-structured interview guide (Appendix E). The development of the interview guide was guided by the review of literature (Artioli et al., 2021; Barbagallo, 2020; Mgbekem et al., 2016 and Shin et al., 2023) The interview guide contained open ended questions about students' knowledge, practice, barriers and support regarding reflective practice. This approach provided a flexible yet focused framework for discussions, enabling the researcher to explore various aspects of reflective practice deeply.

In addition to the FGDs, a survey was conducted to collect quantitative data. This questionnaire was meticulously adapted by the researcher, adhering to established principles of creating effective study instruments, as informed by previous studies and literature on reflection and reflective practice (Artioli et al., 2021; Barbagallo, 2020; Mgbekem et al., 2016 and Shin et al., 2023), (Appendix F). The questionnaire had 28 items encompassing five parts: demographic information (three items), knowledge of reflective practice (six items), practice of reflection (eight items), Barriers to reflective practice (three items) and support regarding reflective practice (eight items).

To ensure the validity of the data and reduce recall bias, the survey and FGDs were conducted simultaneously. Before administering these tools, the researcher greeted the participants, introduced herself, clarified the purpose of the study, and explained the data collection process to establish trust. Informed consent was obtained from all participants. Those who agreed to take part were given the opportunity to review the questionnaire in the researcher's presence, allowing them to seek clarification where needed. Dedicated rooms were provided at each site for the data collection process. With the participants' permission, the discussions were audio-recorded, and significant observations were documented through field notes. The audio recordings were later transcribed word for word by the researcher (Appendix G).

The survey questionnaires were self-administered, while the FGDs were facilitated and moderated by the researcher. The FGDs were scheduled at dates, times, and venues that were convenient, comfortable, private, and non-threatening for the participants (Grove et al., 2013). Both qualitative and quantitative data were collected in English, the official training language for both nursing training institutions. This ensured consistency and clarity in the data collection process.

Pre-test

Pre-test is described as a small-scale version of the major study, designed to identify and address potential issues in the practical aspects of the research (Polit & Beck, 2018). The pre-test was conducted to evaluate the survey questionnaire's effectiveness in yielding the required data to meet the research aims and objectives. Furthermore, this activity enabled the researcher

to confirm the validity of the survey questionnaire and establish the maximum length of each interview session. On average, participants completed the questionnaire within 15 minutes.

For the pre-test, 10 final-year upgrading nursing and midwifery students from MZUNI were conveniently selected to complete the survey questionnaire according to the provided instructions. This approach aligns with Creswell & Plano Clark, (2018) recommendation to avoid using the same participants for the pre-test and the main study. The pre-test was conducted one week before the main data collection phase, ensuring that any necessary adjustments could be made based on the pre-test findings. No changes were made.

3.6.3 Trustworthiness

The study's reliability was ensured through the meticulous implementation of the principles of credibility, dependability, confirmability, and transferability. This method upheld the integrity of the research process and maintained a superior standard of quality throughout.

Credibility

Credibility refers to the confidence in the truth of the data and the interpretations derived from it. According to Lincoln and Guba, a study should be conducted in a manner that enhances the believability of its findings and demonstrates credibility to its external readers (Polit & Beck, 2018). To achieve credibility, the researcher implemented several strategies. Before the commencement of each Focus Group Discussion (FGD), participants were encouraged to provide honest and genuine responses. Additionally, the researcher employed a technique known as "member checking," where two participants from each study site were asked to review the transcripts of the audio recordings to ensure that the content was accurately reproduced. This method helped verify the authenticity of the data. Furthermore, triangulation of data sources was used (by employing mixed method design) to corroborate the findings, adding another layer of credibility to the study.

Dependability

Dependability pertains to the stability and consistency of the data over time and under varying conditions. The findings of the study should be reproducible if the study is conducted again with the same population, context, and methods (Polit & Beck, 2018). To ensure dependability, the researcher used audio recordings to capture the information provided by the participants accurately. The field notes taken during the FGDs were also instrumental in understanding the

context and provided a basis for analyzing the data comprehensively. This combination of methods ensured that the data collected was robust and reliable.

Confirmability

Confirmability is concerned with the objectivity and neutrality of the data, ensuring that the findings are shaped by the participants' responses and not by the researcher's biases or perspectives. The accuracy and relevance of the obtained data were thoroughly checked to ensure that no data was invented or misrepresented. The researcher ensured that the findings reflected the participants' views by having some FGD participants review the transcribed data from the audio recordings to confirm that the typed transcripts were an accurate replication of the information they provided. The conclusions and recommendations were supported by the data, ensuring harmony between the researcher's interpretation and the actual data (Hassan, 2024).

Transferability

Transferability relates to the extent to which the findings of the study can be applied to other contexts. It involves providing enough detail about the study's context and procedures so that readers can assess how much of the findings are applicable to their own situations (Polit & Beck, 2018). To achieve transferability, the researcher provided a detailed description of the steps undertaken from the conception of the study to the reporting of the results. This comprehensive documentation allows other researchers and practitioners to evaluate the applicability of the findings to different settings, thereby enhancing the generalizability of the study.

3.6.4 Validity

According to Polit & Beck, (2018), validity can be confirmed by adhering to the principles of developing a useful questionnaire. Validity refers to the degree to which an instrument accurately measures what it is intended to measure (Grove et al., 2013). There are several types of validity, each serving to confirm different aspects of the instrument's accuracy and utility.

Face Validity: Face validity pertains to the extent to which the items of a questionnaire appear effective in terms of their stated aims. This type of validity is more about the superficial appearance of the questionnaire and whether, at face value, it seems to measure what it is

supposed to. Though face validity is subjective, it is essential for ensuring that respondents and stakeholder view the instrument as relevant and appropriate. To achieve face validity, the researcher conducted a pre-test of the tool. This pre-test helped verify that the items included were appropriate and aligned with the research objectives and questions. The pre-test also allowed for the refinement of the questionnaire based on participant feedback and expert evaluations from the supervisors.

Content Validity: Content validity involves evaluating whether a questionnaire comprehensively includes all the necessary items to cover the concept being measured. This assessment typically requires expert reviews to ensure that the questionnaire content is thorough and relevant. Experts in the field assess the items to confirm that the instrument adequately addresses the subject matter without omissions. Content validity was achieved by clearly outlining the concept of reflective practice, creating questions that represented aspects of the reflective practice experiences and engaging expert evaluation of the items by the study supervisors.

Criterion Validity: Criterion validity examines whether a measure is related to an outcome or comparable with other similar measures. It is divided into two types: concurrent validity and predictive validity. Concurrent validity is established when the questionnaire results are correlated with the results of an established measure administered simultaneously. Predictive validity is determined by the instrument's ability to predict future outcomes based on its results. This was achieved through pre-testing the questionnaire.

Construct Validity: Construct validity is arguably the most challenging form to assess. It pertains to how well a questionnaire measures the underlying theoretical construct it was designed to measure. This validity is established through a combination of theoretical and empirical approaches. Construct validity is based on the widespread use of the questionnaire and the incorporation of all evidence of its performance (Polit & Beck, 2018). It involves various statistical analyses and often requires extensive validation studies over time. The survey questionnaire was pre-tested and issues were refined to achieve construct validity.

3.6.5 Reliability

Reliability refers to the consistency of an instrument in measuring the attributes it is designed to measure (Polit & Beck, 2018). A reliable instrument yields the same results upon repeated administrations under similar conditions.

Internal Consistency Reliability: Internal consistency reliability measures the extent to which items within a questionnaire are consistent with each other and the underlying construct. It is often assessed using statistical tests such as Cronbach's alpha, which indicates the degree of correlation among the items. A high Cronbach's alpha value suggests that the items are reliably measuring the same construct. The Cronbach's Alpha of 0.8 was considered acceptable

To ensure reliability, the researcher included clear instructions on how each section of the questionnaire was to be answered. This clarity helped maintain consistency in responses and reduced variability due to misunderstandings or differing interpretations by respondents. Additionally, the questionnaire was pre-tested before its use in the study. The pre-test provided an opportunity to identify and address any issues related to the instrument's reliability, ensuring that it would consistently measure the intended attributes across different contexts and times.

By thoroughly examining both validity and reliability, the researcher ensured that the developed questionnaire was a robust tool capable of accurately and consistently measuring the research variables.

3.7 Data Analysis

Data collection and analysis were carried out consecutively to ensure a seamless transition between gathering and interpreting data. Braun & Clarke's six phase framework for thematic analysis was used to analyse qualitative data. The audio-recorded data from the focus group discussions (FGDs) were transcribed verbatim by the researcher. This meticulous transcription process involved repeatedly reading the typed transcripts while simultaneously listening to the audio recordings to identify and correct any errors or omissions.

To further enhance the accuracy and reliability of the transcriptions, the researcher conducted a process known as "member checking." This involved contacting two participants from each study site and asking them to review the transcripts. This step allowed the participants to

identify any areas that were missed or misunderstood during the initial transcription, thereby ensuring that the final transcripts accurately reflected the participants' contributions.

Once the transcripts were verified, the final versions were analysed manually. This analysis involved coding the data and identifying themes that aligned with the study objectives. The process of coding allowed the researcher to categorise the data systematically and extract meaningful patterns and insights relevant to the research questions.

For the quantitative aspect of the study, data were managed using the Statistical Package for the Social Sciences (SPSS) version 25.0. Descriptive and comparative statistical analyses were performed for the study variables. The significance level was set at $P < 0.05$. subsequently the X^2 test was employed to discern the statistical significance of the differences in proportions pertaining to the practice of reflection. These analyses investigated the associations and distinctions within the study data, which yielded valuable insights into the dimensions of reflective practices across the two universities. Further, multivariate linear regression was performed to analyse interrelationships between variables and provide insight into how different factors interact and influence outcomes.

Given that this study employed a convergent mixed methods research (MMR) design, the qualitative and quantitative data was analyzed and presented separately and discussed together. This integrated approach allowed for a comprehensive analysis that combined the depth of qualitative insights with the breadth of quantitative data, providing a holistic understanding of the research problem.

Detailed results of the data collection and analysis processes are presented in Chapter Four (4).

3.8 Ethical Considerations

The study proposal was meticulously reviewed and approved by the Mzuzu University Research Committee (MZUNIREC/DOR/23/57) (Appendix A). This ensured that all ethical standards and guidelines were met. This approval provided the necessary clearance to conduct the study at the designated sites. Permission was also sought from relevant authorities to carry out the research at these sites (Appendix B and C).

Throughout the study, the ethical principles of autonomy, informed consent, beneficence, and justice were strictly adhered to, safeguarding the rights and well-being of all participants.

Autonomy and Informed Consent

The principle of autonomy was meticulously observed to respect the participants' independence and decision-making abilities. Participation in the study was entirely voluntary, and participants were thoroughly informed about their right to withdraw from the study at any time without facing any penalties or prejudice. To facilitate informed decision-making, an information leaflet (Appendix A) was provided during the recruitment process. This leaflet detailed the study's aim, objectives, and background, enabling participants to make a well-informed choice about their involvement.

Beneficence

The principle of beneficence, emphasising the importance of doing good and minimising harm, was a critical consideration throughout the study. The potential risk of breach of confidentiality within the focus group discussions was acknowledged. To mitigate this risk, the researcher facilitated an open discussion to establish ground rules, including the importance of maintaining confidentiality. All participants unanimously agreed to these rules, creating a trusted environment for open and honest communication. The researcher actively monitored the interview process to ensure participants' comfort and provided emotional support as needed, using clinical judgment to address any distress.

Justice

The principle of justice, which deals with fairness and equality, was upheld to ensure that the recruitment process was fair and unbiased. The inclusion and exclusion criteria for participant selection were clearly defined, ensuring that all eligible individuals had an equal opportunity to participate. During the focus group discussions, adequate time was allocated to both groups until data saturation was achieved, ensuring the comprehensiveness and representativeness of the collected information. Relevant questions aligned with the study’s objectives were asked, maintaining the integrity of the research process. Participation was voluntary, reinforcing the principle of justice by respecting the autonomy and rights of all individuals involved.

By adhering to these ethical principles, the study aimed to ensure that the research process was conducted with the highest standards of integrity and respect for the participants, thereby enhancing the credibility and reliability of the findings.

CHAPTER FOUR

PRESENTATION OF STUDY RESULTS

4.0 Introduction

This study aimed to explore and establish the experiences of final-year undergraduate Nursing and Midwifery students at Mzuzu University and Daeyang University regarding reflective practice. The quantitative data for this study were collected from 101 students using a structured self-administered questionnaire. This approach allowed for the collection of comprehensive and standardised data on the students' reflective practices, ensuring a broad overview of their experiences.

Qualitative data were gathered through two focus group discussions (FGDs), one held at each university. These FGDs specifically targeted groups of final-year students who were not part of the quantitative survey respondents, thereby providing a distinct and complementary data set. The qualitative data collection aimed to triangulate the quantitative findings, enhancing the depth and richness of the analysis by capturing detailed personal insights and contextual information.

Participation was limited to generic final-year undergraduate Nursing and Midwifery students at both universities. This focus ensured that the study concentrated on a homogenous group, thus providing a clear understanding of their specific experiences and challenges related to reflective practice.

This chapter presents the research findings pertaining to the experiences of final-year undergraduate students regarding reflective practice at Mzuzu University and Daeyang University. For a coherent and systematic presentation of the results, the chapter begins with the quantitative findings, followed by the qualitative findings. This sequential approach allows for a comprehensive analysis, starting with the broad trends identified through the questionnaire data, and then delving deeper into the nuanced insights gained from the FGDs.

By integrating quantitative and qualitative data, this study offers a holistic view of the reflective practices among final-year Nursing and Midwifery students at Mzuzu University and Daeyang

University, highlighting key areas for improvement and development in nursing education at these institutions.

4.1 Quantitative Results

4.1.1 Demographic Statistics

A total of 101 students participated in the study, resulting in a 100% response rate with no withdrawals. The study found that more than two-thirds of the respondents were female (69.3%, n=70). The median age of the respondents was 25 years, with an interquartile range of 5 years. Specifically, the median ages of female students at Mzuzu University and Daeyang University were 24 years and 23 years, respectively. A significant difference in the ages between respondents from MZUNI and Daeyang University was observed (P<0.001).

Table 4.1 provides a detailed overview of the demographic characteristics of the students, including their distribution by university, gender, and age categories. Table 4.2 further breaks down these demographic characteristics by study site, highlighting differences between the two universities.

Table4.1: Overall Participants' Demographic Statistics

Explanatory Variables	**Category**	**N (%)**
University	MZUNI	50(49.5)
	Daeyang	51(50.5)
Gender	Male	30(29.7)
	Female	70(69.3)
	Other	1(0.9)
Age Category	19-24Yrs	54(54.0)
	25-30yrs	33(33.0)
	30+ yrs.	13(13.0)
Median (IQR) age Male		26(6)
Median (IQR) age Female		23(4)
Median (IQR) age Other		25(0)

Table 4.2: Participants' Demographic Statistics by Study Site.

N=101			
	Daeyang n (%)	**MZUNI n (%)**	**P-values**
Gender			
Male	15(29.4)	15(30.0)	0.5
Female	36(70.6)	34(68.0)	
Other	0	1(2.0)	
Age Group			
19-24yrs	36(70.6)	18(36.7)	0.001*
25-30yrs	13(25.5)	20(40.8)	
30+yrs	2(3.9)	11(22.6)	
Median (IQR) age			
Male	24(5)	30(8)	
Female	23(4)	24(5)	
Other	0	25(0)	

The data reveals significant demographic insights that are crucial for understanding the sample. The gender distribution shows a higher number of female participants. The age distribution indicates that the majority of the students fall within the 19-24 years category, with variations observed between the two universities.

The significant difference in the ages between respondents from MZUNI and Daeyang University ($P<0.001$) suggests potential differences in the demographic composition of students at these institutions.

4.1.2 Knowledge of Reflective Practice

The findings indicate varying definitions and sources of knowledge on reflective practice among the respondents. Over half of the respondents (52.3%, n=53) defined reflective practice as "reviewing actions. Additionally, 22.8% (n=23) of respondents described reflective practice as an "own definition of an event that happened," which suggests a personalised approach to

reflection, highlighting individual perspectives and interpretations of experiences. A smaller proportion (17.8%, n=18) viewed reflective practice as "looking back," while 6.9% (n=7) equated it with "critical thinking." When comparing responses by university, more students from Mzuzu University (56%, n=28) defined reflective practice as reviewing actions compared to those from Daeyang University (49%, n=25).

Table 4.3 below presents the distribution of the responses on the knowledge of reflective practice by study site.

Table 4.3: Knowledge of Reflective Practice by Study Site

Variables	**Categories**	**Daeyang University n (%)**	**Mzuzu University n (%)**	**Total N (%)**
Definition of Reflective Practice	Own Definition	8(15.7)	15(30.0)	23(22.8)
	Looking back	12(23.5)	6(12.0)	18(17.8)
	Reviewing Actions	25(49.0)	28(56.0)	53(52.5)
	Critical thinking	6(11,8)	1(2.0)	7(6.9)
Where did you learn reflection from?	Lecturer/Classroom	40(78.4)	46(92.0)	86(85.1)
	The clinical area from colleagues	2(3.9)	4(8.0)	6(5.9)
	Qualified nurse	5(9.8)	0	5(4.9)
	Internet	2(3.9)	0	2(1.9)
	Others	2(3.9)	0	2(1.9)
How do you describe the learning process of reflection?	Normal as any lesson	38(74.5)	41(82.0)	79(78.2)
	Easy	5(9.8)	5(10.0)	10(9.9)
	Difficult	8(15.7)	4(8.0)	12(11.9)
Does reflection help you in difficult situations	Yes	30(58.8)	37(74.0)	67(66.3)
	No	21(41.2)	13(26.0)	34(33.7)
Does reflection influence your actions and reactions toward situations	Yes	51(100.0)	50(100.0)	101(100.0)
	No	0	0	0
Do you think Reflection is useful to you?	Yes	51(100.0)	50(100.0)	101(100.0)
	No	0	0	0

The majority of respondents (85.2%, n=86) indicated that they learned about reflection from their lecturers or classroom, clinical areas, or colleagues. A smaller segment (15.8%, n=16) learned about reflection from clinical areas, colleagues, and the internet.

Most respondents (78.2%, n=79) described the learning process of reflection as "normal as any lesson," suggesting that reflective practice is integrated into their regular educational activities. However, 9.9% (n=10) found it "easy," while 11.9% (n=12)

All respondents (100%, n=101) agreed that reflective practice is useful and it influences their actions and reactions towards situations. This unanimous agreement underscores the perceived value and impact of reflective practice in shaping professional behaviour and decision-making.

The data also revealed that a significant proportion of respondents (66.3%, n=67) found reflection helpful in difficult situations, while 33.7% (n=34) did not.

4.1.3 Practice of Reflection

Almost all respondents (98%, n=99) reported that they were practicing reflection. Respondents were asked to select from a given list of factors that motivate them to practice reflection, 74 (73.3%) indicated that reflection practice shapes future actions/interventions in similar situations, 49 (48.5%) indicated that it provides a satisfactory outcome of learning/care", with those who chose emotional maturity and boosting confidence as the motivational factors at 33 (32.7%) and 34 (33.7%) respectively. A majority of the respondents 85(84.2%) believed that those who practice reflection have better healthcare delivery outcomes than those who do not practice reflection.

Table 4.4 below shows the distribution of the rest of the participants' responses regarding practicing reflection.

Table 4.4: Participants' Responses on Practice of Reflection

Variables	Categories	Daeyang University n (%)	Mzuzu University n (%)	Total N (%)
What makes you practice reflection?	It provides a satisfactory outcome of learning/care	27(52.9%)	22(44.0)	49(48.5)
	It builds emotional maturity as I reflect on negative events.	15(29.4)	18(36%)	33(32.7)
	It boosts confidence	19(37.3)	15(30.0)	34(33.7)
	It shapes future actions/ interventions in similar situations	32(62.8)	42(84.0)	74(73.3)
What have been the outcomes of your reflection	Modification of future actions	36(70.6)	36(72.0)	72(71.3)
	Satisfactory outcomes on similar events	13(25.5)	11(22.0)	24(23.8)
	Enhanced emotional strengths	2(3.9)	3(6.0)	5(4.9)
	Regretted practicing reflection	0	0	0
Has reflective practice influenced how you perceive situations?	Yes	51(100)	49(98.0)	100000
	No	0	1(2,0)	1(0.99)
Do you observe differences between yourself and those who do not practice reflection?	Yes	46(90.2)	44(88.0)	90(89.1)
	No	5(9.8)	6(12.0)	11(10.9)
Are your care outcomes better than of those who do not practice reflection?	Yes	42(82.4)	43(86.0)	85(84.2)
	No	9(17.6)	7(14.0)	16(15.8)

4.1.4 Multivariate Analysis on Practice of Reflection

A linear probability regression model analysis was used to identify factors associated with the practice of reflection while adjusting for covariates. The dependent variable was "Do you practice reflection?" Significant variables from the bivariate analysis (p-value < 0.05) were included in the regression model as independent variables. Although age, gender, and college were not significant in the bivariate analysis, they were included in the regression model due to their potential relevance.

According to the regression analysis, significant associations were found with the perceived differences in healthcare delivery outcomes between those who practice reflection and those

who do not. The coefficient for this variable was -0.11 (95% CI [-0.19, -0.03], P=0.009), indicating that perceptions of better care outcomes negatively associate with the practice of reflection among participants.

Table 4.5: Linear Probability Model Analysis Output

Variable	Coefficient	95.0% Confidence Interval		P-Value
College				
Daeyang	Ref.			
MZUNI	-0.01	-0.06	0.06	0.92
Gender				
Male	Ref			
Female	-0.05	-0.11	0.02	0.09
Others	-0.03	-0.30	0.24	0.83
Age Category				
19-24yrs	Ref			
25-30yrs	-0.01	-0.07	0.05	0.708
30yrs+	0.01	-0.09	0.09	0.833
Will you recommend a reflection?				
Yes	Ref			
No	-0.12	-0.25	0.02	0.08
Is knowledge a barrier to Reflective practice?				
Yes	Ref			
No	0.04	-0.03	0.11	0.251
Have you ever failed to practice reflection?				
Yes	-0.02	-0.12	0.07	0.616
No	Ref			
Are your Care Outcomes better than of those who do not practice reflection?				
Yes	Ref			
No	-0.11	-0.19	-0.03	0.009*
Is the clinical environment a barrier to Reflective practice?				
Yes	Ref			
No	0.02	-0.04	0.08	0.518

4.1.5 Barriers to Reflective Practice

This study also explored barriers that students at both universities face regarding reflective practice. When asked if they had ever failed to reflect on a situation before, 91% (n=) of the participants said they had ever failed to reflect before with over half (52.5%, n=53) of the respondents citing the unsupportive clinical environment as the main barrier. Inability to identify events or situations to reflect upon was also mentioned by (33.6%, n=34) of the respondents as a barrier to reflection followed by lack of time and emotional consequences at (31.7%, n=32) and lastly lack of knowledge at (26.7%, n=27).

Table 4.6 shows the participants' distribution of responses on barriers to reflection by study site.

Table 4.6: Barriers to Reflective Practice

Variables	**Categories**	**Daeyang University n (%)**	**Mzuzu University n (%)**	**Total N (%)**
Have you ever failed to reflect on some situations before?	Yes	46(90.2)	45(90.0)	91(90.1)
	No	5(9.8)	5(10.0)	10(9.9)
What made you fail to practice reflection	Lack of knowledge about reflection	14(27.5)	13(26.0)	27(26.7)
	Lack of time	19(37.3)	13(26.0	32(31.7)
	Emotional consequences	25(40.0)	7(14.0)	32(31.7)
	Unsupportive Clinical Learning Environment	21(41.2)	32(64.0)	53(52.5)
	Inability to identify events/situations to reflect upon	16(31.4)	18(36.0)	34(33.6)
Based on your answers, will you consider recommending reflection to any of your colleagues?	Yes	48(94.1)	48(96.0)	98(95.1)
	No	3(5.9)	2(4.0)	5(4.9)

4.1.6 Reflective Practice Support

This study explored support on reflective practice that qualified nurses provide to undergraduate nursing and midwifery students during clinical practice. Almost all students, 95 (94.1%) agreed to the assertion that support on reflective practice from qualified nurses was essential. However, when asked if they receive the support, 40 (78.6%) from Daeyang University indicated to have been receiving the support while over half, 27 (54%) of Participants from Mzuzu University indicated that they were not receiving any reflective practice support from qualified nurses in the clinical area.

When asked if they thought nurses were interested in supporting students, 40 (39.7%) said yes, while 61 (60.3%) said no. Results showed that Daeyang students agreed more to nurses being interested in supporting students (n=26 for yes) against (n=25 for no), compared to Mzuzu university students who largely disagreed that nurses were not interested in supporting them (n=15 for yes) against (n=35 for no).

Satisfaction levels differed significantly between the two institutions. While 29 (56.9%) of Daeyang University students reported being happy with the support received, a majority of Mzuzu University students, 33 (63.0%), expressed dissatisfaction. Statistical analysis revealed a significant difference in responses, with $X^2 = 5.32$, $P = 0.02$.

Table 4.7 shows the distribution of responses on reflective support received from qualified nurses.

Table 4.7: Support on Reflective Practices from Qualified and Practicing Nurses.

Variables	**Categories**	**Daeyang n(%)**	**Mzuzu n(%)**	**Total N(%)**	**χ^2 (p-value)**
Do you receive support from qualified nurses regarding reflective practice?	Yes	40 (78.6)	23 (46.0)	63 (62.4)	11.03 (0.001)
	No	11 (21.6)	27 (54.0)	38 (37.6)	
Do you think support from qualified nurses regarding reflection is essential?	Yes	46 (90.2)	49 (98.0)	95 (94.1)	2.75 (0.09)
	No	5 (9.8)	1 (2.0)	6 (5.9)	
I need support and guidance from qualified nurses to help me identify issues for reflection	Disagree	6 (11.7)	4 (8.0)	10 (9.9)	0.76 (0.68)
	Not Sure	9 (17.6)	7 (14.0)	16 (15.8)	
	Agree	36 (70.6)	39 (78.0)	75 (74.3)	
Qualified nurses should be consistent in giving advice on reflection to avoid confusion	Disagree	5 (9.8)	0 (0.0)	5 (4.9)	6.194 (0.04)
	Not Sure	8 (15.7)	13 (26.0)	21 (20.8)	
	Agree	38 (74.5)	37 (74.0)	75 (74.3)	
Qualified nurses are interested in supporting me with reflection	Yes	25 (49.0)	15 (30.0)	40 (39.7)	3.818 (0.05)
	No	26 (51.0)	35 (70.0)	61 (60.4)	
I am happy with the support qualified nurses provide to me regarding reflective practice	Yes	29 (56.9)	17 (34.0)	46 (45.5)	5.32 (0.02)
	No	22 (43.1)	33 (66.0)	55 (54.5)	
Qualified nurses are equipped with knowledge of reflective practice	Disagree	6 (11.8)	6 (12.0)	12 (11.9)	2.63 (0.26)
	Not Sure	22 (43.1)	29 (58.0)	51 (50.5)	
	Agree	23 (45.1)	15 (30.0)	38 (37.6)	
Qualified nurses engage in reflective practice	Yes	33 (64.7)	21 (42.0)	54 (53.5)	5.23 (0.02)
	No	18 (35.3)	29 (58.0)	47 (46.5)	

4.2 Qualitative findings

Qualitative data were collected through two focus group discussions, providing rich insights into participants' perspectives on reflective practice. The collected data were manually analysed using Braun and Clarke's six-phase framework for thematic analysis. This approach allowed for a systematic and rigorous identification of patterns within the data (Braun & Clarke 2013), leading to the emergence of three key themes: **Knowledge**, **Practice**, and **Clinical Support**. Each theme was further divided into sub-themes, as outlined in Table 4.8. The narratives that follow provide a detailed exploration of these themes and sub-themes.

The narratives accompanying these themes provide a comprehensive understanding of the factors influencing reflective practice and its implications for personal and professional development. These findings emphasise the need for institutional support and targeted strategies to enhance reflective practice within clinical settings.

Braun and Clarke's Six Phases of Thematic Analysis

Braun and Clarke's thematic analysis framework is a widely used qualitative method for systematically identifying, analysing, and reporting patterns (themes) within data. It offers a flexible and rigorous approach that can be adapted across diverse research contexts. Below are the six phases as explained by Braun & Clarke, (2013).

1. Familiarisation with the Data

Researchers immerse themselves in the data by reading and re-reading transcripts, listening to audio recordings, or reviewing field notes. This phase involves noting initial impressions and ideas that arise from the raw data. The goal is to become deeply familiar with the content and context of the data. The researcher transcribed the data and verified the transcription by reading and re-reading the transcripts while listening to the audio recordings and reviewing field notes. Areas that were incompletely or incorrectly transcribed were noted and corrected.

2. Generating Initial Codes

Researchers identify and label key features of the data that appear interesting or meaningful. This involves organizing data into manageable chunks and assigning a code to each. Coding can be data-driven (inductive) or guided by existing frameworks (deductive). The goal is to systematically reduce the data while retaining its essential meanings thereby generating initial

codes. The researcher read and re-read the transcripts to identify patterns in the data and then developed a list of codes.

3. Searching for Themes

Codes are grouped into broader categories to identify patterns or themes. This involves collating all data relevant to each potential theme and considering relationships between codes, sub-themes, and overarching themes. The aim is to organise codes into candidate themes that reflect the research questions. The researcher collated the codes with extracts. Then groups of codes were made to make potential themes.

4. Reviewing Themes

Candidate themes are refined by checking their coherence with the coded data and their alignment with the entire dataset. Themes may be merged, refined, or discarded at this stage. The g*oal* is to ensure themes are distinct, well-supported by data, and relevant to the research objectives. The researcher further assessed the groups of codes and identified themes. Those that did not align with the dataset were discarded.

5. Defining and Naming Themes

Themes are further refined and clearly defined, with attention given to their boundaries and the specific story each theme tells. Researchers develop concise, meaningful names that capture the essence of each theme. The goal is to articulate a clear narrative for each theme, ensuring they work together to address the research question. The researcher further refined and defined the themes. Concise and meaningful names were given to each theme and sub-theme.

6. Producing the Report

The final phase involves writing a detailed report that presents the themes, supported by illustrative data extracts. The report should provide an insightful and compelling account of the data that connects back to the research questions and objectives. The g*oal* is to deliver a clear and coherent analysis that conveys the significance of the findings. The researcher wrote an account of the thematic analysis.

Table 4.8: Themes and Sub-themes

THEMES	SUB-THEMES
1. Knowledge	1. Definition / meaning of reflective practice
	2. Learning (source and process of learning)
2. Practice	1. Enablers of reflective practice
	2. Barriers of reflective practice
	3. Outcomes of reflective practice
3. Clinical Support	1. Knowledge, orientation and understanding of reflective practice by qualified nurses
	2. Motivation and willingness to support
	3. Clinical Learning Environment

4.2.1 Knowledge of Reflective Practice

This study revealed that final year undergraduate nursing and midwifery students had varying views on reflective practice knowledge. Three sub-themes emerged from their knowledge of reflective practice, which included definition/meaning of reflective practice, learning (source and process of learning) and benefits of reflective practice. The narratives are described below.

Definitions / Meaning of Reflective Practice

Some final year undergraduate nursing and midwifery students viewed reflective practice as looking back and reviewing past actions as echoed in:

> "*To me reflection is a process of reflecting on what you did; wrong or right at clinical area, after reflecting we evaluate the actions and re-plan. I can say it is a review of previous actions."* (ID 5, MZUNI)

This is supported by another participant from Mzuzu University who said:

> "*Ok for me reflection is eer… like looking back at a situation or event that happened, like in the evening or during break time when something happens or I met a difficult situation, I let my mind go back and analyse the whole event mmh… for example*

how I handled a situation, right or wrong, then I learn from that situation how to handle it in future." (ID1, MZUNI)

Similar views came from students from Daeyang who said:

"I can say reviewing actions from a certain day or event that would have happened to me." (ID 3, Daeyang Uni.)

According to these participants, reflection involves looking back at an action, whether right or wrong with an aim of analysing how it was handled and identifying areas for improvement.

However, some students view reflection as a scenario-based understanding whereby analysis is made on one's-self work as narrated in:

"A process of identifying a unique scenario during practice and understand how the scenario or procedure was supposed to be tackled and how others helped during the process." (ID 3, MZUNI)

Another student supported this definition by saying:

"For me reflection is like analysing work or things that you have done to identify ways on how you can improve and also learn from it." (ID 5, Daeyang Uni.)

These students narrated that reflection involves understanding unique scenarios or events during practice. One has to consider how a procedure should have been tackled and recognise the role of others in that process. The later student understands reflection as not limited to clinical setting but applies to various aspects of life. This observation is supported by another student saying:

"Just to add that it is not only at clinical area but it can also be elsewhere" (ID 4, MZUNI)

However, some students viewed reflective practice as critical thinking as echoed in the following narratives:

"It is thinking critically about something that one has done to learn from it. It can be right or wrong but the purpose is to think through it and learn so that you can do better in future." (ID 2, Daeyang Uni.)

"It is a process of having an insight of an event or practice by thinking critically and analysing all the actions for future improvement." (ID 6, Daeyang Uni.)

The above narratives emphasise that analysis should be made on the entire, and not just isolated moments of an event. This holistic approach allows one to learn from both successes and challenges.

Learning (Source and Process of Learning)

This was another sub-theme that emerged from the knowledge the final year undergraduate nursing and midwifery students have on reflective practice. Despite defining what reflective practice means to them, students had different views on the source and process of learning. Some said they learned in class during their first year as narrated in:

"We learnt in class in our first year during fundamentals of nursing." (ID 5, MZUNI)

Other students supported this response and further narrated the process of learning as being normal and interesting like any other lesson:

"And it was repeated in our second year. We used Gibbs reflective cycle. This model has steps… so it's like one has to follow those steps to reflect effectively… it needs a lot of time. However, the lesson itself was just as any other lesson." (ID 6, MZUNI)

"For me it was an interesting lesson and after learning I was eager to practice but when I was allocated to my first clinical area, I did not see any qualified nurse doing it and I thought it was just theory until towards the end of that allocation when our lecturer told us to reflect on the whole allocation and write a reflective account using Gibbs reflective cycle. It is doable." (ID 1, MZUNI)

The students highlighted that they learned Gibbs Reflective Cycle as a model for their reflective practice and they were quick to say it needs time. Transitioning from theory to practice was a challenge since it took a whole lot of a clinical placement.

Unlike Mzuzu students, Daeyang University students said it was mentioned in passing during other lessons and not as a lesson on its own, the internet and qualified nurses were the source of their knowledge as mentioned in:

"We learnt in class in our first year but it was in passing so I cannot comment much." (ID 5, Daeyang Uni.)

"Indeed, we have been told to reflect on several occasions during other lessons but I don't remember having a special lesson on reflection even though at clinical area we are asked to write a reflective essay regarding that clinical allocation. I learnt a lot through the internet." (ID 6, Daeyang Uni.)

These sentiments were supported by other students saying:

"I want to agree with ID 6. If you ask our lecturers, they will tell you we learnt in class but the truth is that we did not learn in details. I am saying this because what we learnt in class and what we are told to practice at the clinical areas are two different things. We never learnt of the steps yet during clinical practice we are asked to write a reflective account or report of how we practised in each clinical area and that's when we are told to follow the steps. Honestly, we learnt a lot from friends, internet and some nurses in the ward." (ID 2, Daeyang Uni.)

In this narration, the student observed a theory-practice gap by saying that what they learnt in class was different from the expected practice at the clinical area. However, some students said they had an explanation on reflective practice and how to do it from their lecturer as narrated in:

"Yes, we have been learning in passing not a lesson on its own but I remember getting an explanation from one of our lecturers after asking." (ID 1, Daeyang Uni.)

"Just like ID 1 we were in the same group when our lecturer went into details of how one can reflect and write an essay." (ID 4, Daeyang Uni.)

4.2.2 Practice of Reflection

Practice of reflection emerged as another theme from the experiences that final year undergraduate students have regarding reflective practice. From this theme, three sub-themes emerged which included; 1) Enablers of reflective practice, 2) Barriers of reflective practice and 3) outcomes of reflective practice. In this section, findings related to each sub-theme are described.

Enablers of Reflective Practice

The students identified factors that enabled them to practice reflection. This sub-theme was exclusively interpreted from students' narratives. Many students reported that their practice of reflection is triggered by difficult situations and/ or new case scenarios. One of the students had this to say:

> *"I reflect whenever I meet a difficult or challenging situation like new case scenarios."* (ID 1, MZUNI)

Another student concurred with the statement by saying:

> *"I can say I practice reflection very often like every time I encounter a difficult case or whenever a patient, I was caring for develops an adverse event."* (ID 4, Daeyang Uni)

Reflection occurs when one has encountered a difficult situation with an aim of finding solutions to the case, which in turn improves patient care. However, another student indicated that they practice reflection even when there is a positive scenario as stated in:

> *"From the knowledge and experience I have; I reflect even when I experience a positive event for example when my critically ill patient gets better or even discharged from the hospital. I reflect and learn from the actions I did in caring for that particular patient. If I meet a similar case, I apply what I learnt from that previous case."* (ID 5, Daeyang Uni.)

According to this narrative, positive events also facilitate reflection which gives insights into what worked well and what could be improved. Positive outcomes also offer valuable learning opportunities.

Some students stated that critical decision making facilitated their practice. In support of this, one student said the following:

> *"I do reflect when I want to make a critical decision about my patients 'care."* (ID 4, MZUNI)

Reflecting on critical decisions regarding patient care is essential for nursing practice. It also allows nursing and midwifery students to refine their practice, prioritise patient safety and provide patient-centred care. The narrative above highlights the importance of thoughtful considerations and self-awareness.

Some students indicated that they practice reflection because it is a clinical requirement. They are required to reflect either during or at the end of their clinical placement. One participant reported that:

> *"Like during clinical allocation every student is supposed to find situations; good or bad to reflect on or sometimes a student is asked to reflect on the whole clinical placement and write a report using the Gibbs reflective cycle that we learnt."* (ID 2, MZUNI)

Another participant concurred with the sentiment by indicating that:

> *"I practice reflection rarely, usually at the end of each clinical allocation i.e. for academic work but for personal stuff I do it daily because I don't need to write essays about my issues."* (ID 2, Daeyang Uni.)

Nursing and midwifery students seek situations during clinical allocation, both positive and negative, to reflect upon because it is a clinical requirement by their universities. According to the narrative, they are sometimes required to reflect on their entire clinical placement.

The findings above indicate that nursing and midwifery students experienced reflection as a result of motivational and educational factors.

Barriers to Reflective Practice

Reflective practice is a crucial aspect of personal and professional development, but it is not without challenges. Barriers to reflective practice emerged as a sub-theme from practice of reflection. A majority of the students reported time constraint as a barrier to reflection as narrated in:

> *"It is not all the time I use Gibbs reflective cycle because it is time consuming. Sometimes you don't have time to write all the steps but, in the mind, you cruise through*

the steps maybe for two minutes and come up with the best way of handling that situation." (ID 1, MZUNI)

This was supported by another participant:

"It is indeed time consuming especially when you are using the models because it requires one to read or find references where you identify ways on how to handle the situation better in future. And you have to write everything like to keep records …journaling." (ID 4, MZUNI).

Another participant identified the same barrier by saying:

"Yes, it is time consuming especially when one is following the steps because it requires one to read a lot and write everything in order." (ID 4, Daeyang Uni.)

As highlighted by the participants, engaging in reflective practice can indeed be time-consuming. When using models like the Gibbs reflective cycle, students are encouraged to follow a structured process that involves several steps. Finding dedicated time for reflection amidst busy schedules can be challenging.

Unsupportive clinical learning environment was also reported by a majority of the students. Lack of supervision by their lecturers and lack of support regarding reflection by qualified nurses were reported as stated in:

"I want to comment on lack of supervision from both our lecturers and qualified nurses. My observation or I can say my experience over the past four year of my schooling has been that our lecturers visit us once or twice for support and supervision especially when we are in other districts not Lilongwe and we learn from the qualified nurses on the ground. Eer… most qualified nurses don't practice reflection and when we ask then to assist us, they just tell us to read." (ID 1, Daeyang Uni.)

In agreement, another participant said:

"During my clinical attachments I observed that majority of nurses don't practice reflection and could not support us to reflect either. A few could just ask us to evaluate ourselves on daily basis but not mentioning any steps or model. So most clinical environments are not supportive as far as reflection is concerned." (ID 1, MZUNI)

As narrated by the students, many nurses may not fully understand the value of reflective practice or structured models available. They may not actively encourage or guide students in

reflection without awareness. It is also highlighted that lecturers rarely visit the students for supervision and support, which poses as a barrier to reflection using the model they were taught in class.

Another barrier that some students reported was inadequate or lack of knowledge regarding reflective practice as indicated in:

> *"Yes, like for me I remember when I used to ask my friends to help me use the Gibbs reflective cycle. Despite learning in class I could not use the model. Inadequate or lack of knowledge makes one fail to practice reflection. You can imagine how bad those that do not have knowledge can be. It becomes easier with adequate knowledge."* (ID 2, MZUNI)

Another student stated similar views;

> *"I just want to add that lack of knowledge also hinders one from practising reflection. You just accept the way things are done."* (ID 5, Daeyang Uni.)

In these statements, the students indicated inadequate or lack of knowledge as a hindering factor to effective reflection. Lack of understanding or awareness about reflection makes it challenging for one to engage in meaningful reflection.

Another barrier mentioned by the students was reflective practice being laborious. One student had this to say:

> *"It is indeed laborious and I personally feel there is no need to write down my reflections as I tend to reflect automatically in my mind without having to write a thousand-word account."* (ID 2, Daeyang Uni)

This student feels reflective writing is a lot of work as it requires time, effort and genuine self-examination. The student highlights her preferred way of reflecting over reflective writing.

Outcomes of Reflective Practice

This is also another sub-theme that was identified from the practice of reflection by final year undergraduate nursing and midwifery students. The students identified several valuable outcomes of reflective practice for personal as well as professional growth. One key outcome mentioned by the students was continuous learning and error reduction as stated in:

> *"There is always a risk of repeating mistakes for those that do not practice reflection but for those that reflect, such mistakes are avoided when a similar situation occur."* (ID 1, Daeyang Uni.)

Another student supported the statement by saying:

> *"…those who reflect bring new ideas on how to care for patients."* (ID 5, MZUNI)

These sentiments entail that reflection allows one to gain insights, and new knowledge to correct misconceptions and enhance understanding of the experience/ situation in relation to theory and practice. They also avoid repeating mistakes by learning from past experiences.

Some students also mentioned improved patient care as a key outcome of reflective practice as narrated in:

> *"…those that practice reflection have improved patient care outcomes."* (ID 2, MZUNI)

Another student said:

> *"Those who practice reflection improve skills and provide patient-centred care."* (ID 3, MZUNI).

According to final year undergraduate students, reflection allows them to adjust their approaches in order to meet the unique needs of the patients. Reflection also increases self-awareness, a crucial component of emotional intelligence that helps one to recognise one's strengths and weaknesses. The students identified emotional intelligence as one of the outcomes of reflective practice as narrated:

> *"Just to add that those who do not practice do not show any remorse for example if a qualified nurse has treated you badly like shouting at you in the presence of patients and guardians, do not regret his/ her actions and they never apologise so it is like they are okay with their actions and they don't change. Those who reflect change for the better, they may even apologise for treating you badly."* (ID 2, Daeyang Uni.)

Another student supported the other by saying:

> *"I just want to add that it also helps with emotional maturity. Like when I was in first year I used to cry whenever my patient has died but after several reflections I matured emotionally as I no longer cry (laughs) not that crying is bad but I realised my crying*

affected my care provision as well because I couldn't take a role of a comforter… I would always want to be comforted as well. Instead of crying I now comfort the bereaved family and make sure my patient has a respectful last office." (ID 4, MZINI)

From these narratives, it is evident that engaging in reflective practice has led to emotional intelligence. A feeling of remorse or being apologetic for a wrong doing and provision of compassionate care are given as examples.

Professional growth was also mentioned by a majority of students as an outcome of reflective practice. One student had this to say:

"…those that reflect are responsible and accountable for their care." (ID 5, Daeyang Uni.)

In agreement another student stated the following:

"Those that do reflection think critically to identify care plans for their patients." (ID 4, Daeyang Uni.)

Another student supported the sentiments by saying:

"…those that reflect accept positive changes and improve their knowledge and skills." (ID 6, Daeyang Uni.)

The students stated that reflective practitioners embrace change, think critically, improve their knowledge and skills and are accountable for their actions which results in professional development.

Benefits of Reflective Practice

Benefits of reflective practice emerged as a third sub-theme under knowledge of reflective practice. Final year undergraduate nursing and midwifery students indicated several benefits. Some students stated that reflective practice enhances patient treatment and care as narrated in:

"It improves treatment of patients and patient care as consideration is given to how I practice especially when attending a difficult case." (ID 4, Daeyang Uni.)

Another student concurred with the above insight by saying:

"That is true because one develops a plan on how best to tackle a situation should it repeat itself thereby helping us to improve our skills and practice." (ID 5, MZUNI)

By considering their practice during challenging cases, participants refine their approach and provide better care thereby impacting patient treatment and care.

Some students view reflection as a learning strategy as it acts as a guide or reference. They can draw upon their reflective insights to inform their decision making when similar scenarios are encountered as indicated in:

> *"It acts as a guide or reference if you encounter the same scenario in future."* (ID 6, MZUNI)

Another student supported this by saying:

> *"It is a learning process… helps one to learn from a happened event."* (ID 1, MZUNI)

These sentiments entail that reflection helps them to learn from past events, experiences and patient interactions thereby preventing repetition of mistakes. Another student added that students also learn from others during reflection as narrated in:

> *"It also helps one to learn from others especially when we are able to discuss as a group on how best to care for patients."* (ID 2, Daeyang Uni)

Reflective discussions within a group setting enable students to learn from each other thereby enhancing collective knowledge and informing best practices.

Some students also indicated that reflective practice helps them to think critically about events and situations they meet during clinical practice saying:

> *"For me reflection has also encouraged critical analysis of my clinical practice."* (ID 5, Daeyang Uni.)

In support of this, was another student who indicated that:

> *"I think it also helps us think critically about anything and everything eer… I can give an example like when there is an emergency case, one is able to think and act quickly."* (ID 2, MZUNI)

The participants stated that reflection encourages them to think deeply about various aspects of their practice, including emergency situations.

Another benefit of reflective practice that was mentioned by the participants is emotional maturity as indicated in:

> *"I just want to add that it also helps with emotional maturity. Like when I was in first year I used to cry whenever my patient has died but after several reflections I matured emotionally as I no longer cry (laughs) not that crying is bad but I realised my crying affected my care provision as well because I couldn't take a role of a comforter… I would always want to be comforted as well. Instead of crying I now comfort the bereaved family and make sure my patient has a respectful last office."* (ID 4, MZUNI)

As narrated above, reflection contributes to emotional maturity. Participants shared personal growth stories such as overcoming emotional reactions such as crying and learning to provide compassionate care while maintaining professionalism.

4.2.3 Clinical Support Regarding Reflective Practice

This study also sought to explore clinical support that qualified nurses provide to undergraduate nursing and midwifery students. Three sub-themes arose from the analysis of this theme namely: 1) knowledge, orientation, and understanding of reflective practice by qualified nurses, 2) motivation and willingness of qualified nurses to support and 3) Clinical learning environment. Presented below are the findings that surfaced from each sub-theme.

Knowledge, Orientation and Understanding of Reflective Practice by Qualified Nurses

This sub-theme had a majority of the students saying qualified nurses lacked knowledge and understanding of reflective practice especially use of Gibb's Reflective Cycle. One student mentioned that:

> *"The qualified nurses could not give me the support I needed because they did not know the Gibb's Reflective Cycle…that's why I was consulting my friends."* (ID 2, MZUNI)

This was supported by another student who said:

> *"I want to agree with ID 2 because usually we practice reflection at the clinical area where our lecturers can come for support once and we rely on qualified nurses in that*

clinical area to teach and supervise us but it seems they lack knowledge on reflection especially on use of reflective models." (ID 4, MZUNI)

Another student agreed by saying:

"Eer… most qualified nurses don't practice reflection and when we ask then to assist us, they just tell us to read. Some are honest enough to say they don't know the steps if there are any." (ID 1, Daeyang Uni.)

There is a knowledge gap amongst qualified nurses. Although students rely on them for support and supervision in the clinical area, these nurses lack familiarity with reflective models like the Gibbs model. Some qualified nurses advise students to read independently, while others admit their lack of knowledge.

Motivation and Willingness of Qualified Nurses to Support

This sub-theme brought different views of final year undergraduate nursing and midwifery students with some saying qualified nurses are motivated and willing to support students while others disagreed by reporting that qualified nurses are not motivated and willing.

Those of the view that nurses are motivated and willing to support said:

"For me most ward in-charges are friendly and support us well for example sometimes they are able to watch us perform procedure and at the end they ask us to evaluate ourselves… so it's like they are telling us to reflect on how we conducted the procedure." (ID 6, Daeyang Uni.)

Another student agreed by saying:

"I just want to add that there are some nurses who show interest in reflection and they support, I have been meeting such nurses myself only that they are a few of them especially registered nurses… for example if we fail to perform a procedure, they would give us an assignment to go and review the procedure identify where we did well and where we did not do well." (ID 3, MZUNI)

This reveals that students experienced support from some ward in-charges and nurses when it comes to reflective practice. These supportive individuals encourage students to evaluate their own performance after procedures, fostering a culture of self-reflection. However, it is worth noting that such supportive nurses are relatively few, especially among state registered nurses.

Some students had views that qualified nurses were not motivated and willing to support them with reflective practice by saying:

> *"I have had a bad experience when it comes to receiving support regarding reflection from the qualified nurses. I am not even sure if they engage in reflection themselves let alone supporting us to practice reflection."* (ID 1, Daeyang Uni.)

Another student added the following:

> *"I just want to add that there is also this group of qualified nurses who tells you it is not their duty to teach or supervise us. When you ask them for help, they will literally tell you 'That is not my job, ask the in charge or your lecturer' and they would not get involved with any student… (Laughs). To them it's like we don't exist. Students never get support from such nurses."* (ID 3, Daeyang Uni.)

This was supported by another student who mentioned that:

> *"Most qualified nurses think that third- or fourth-year students know everything so they leave students to work alone in the wards while they are chatting or engage in personal business. I would want the qualified nurses and students to work together."* (ID 1, MZUNI)

These narratives show that students are facing challenges related to receiving support for reflective practice form qualified nurses. Some nurses do not engage in reflection themselves and refuse to assist students claiming it is not their responsibility. Additionally, some nurses assume that third-year and fourth-year students already know everything, leaving them to work independently. The desire is for better collaboration between qualified nurses and students to enhance reflective learning and patient care.

Clinical Learning Environment (CLE)

Clinical learning environment is another sub-theme that arose from the support that qualified nurses provide to final year undergraduate nursing and midwifery students. A majority of the students reported unsupportive CLE. This is caused by poor relationships, high work load and inadequate human and material resources as reported in:

> *"I just wish that qualified nurses support us respectfully not shouting or intimidating us before patients, it demoralises us students."* (ID 2, MZUNI)

The narration by this student reveals an unwelcoming learning environment where qualified nurses used shouting and intimidation to correct students. Some students highlighted high work load and over delegation by nurses, which led to CLE being unsupportive. Examples of such narrations are as follows:

> *"The thing is that qualified nurses see us (students) as additional staff. Majority of nurses are happy when we are allocated to their ward because they feel relieved of the high workload in the wards and because of that mentality they don't support us much. They just delegate work to students while they sit in the nurses' office or they do personal things. I wouldn't say qualified nurses supported me as far as reflection is concerned."* (ID 2, Daeyang Uni.)

> *"To tell you the truth qualified nurses are overwhelmed with high workload and it is difficult to support us properly. As a result, they take us as their colleagues so it's like we are there to cover shortage. Most of the qualified nurses provide routine care and some nursing care activities are left to guardians like bed bathing, turning and positioning patients, feeding etc. so it's survival of the fittest for students."* (ID 6, MZUNI)

Another student concurred with others by saying:

> *"…I cannot blame them (nurses) because I know that usually it is because they are overwhelmed with high work load so to teach or support us in a manner that we want is impossible. It's easier said than done because it's like doubling the qualified nurses' work. I feel it could be better if our college employs enough clinical instructors to support students."* (ID 1, MZUNI)

Based on the statements above from the students, it shows that qualified nurses often view students as additional staff rather than providing adequate support for reflective practice. The nurses' overwhelming workload contributes to this situation, leading them to delegate tasks to students without actively engaging in reflective teaching or guidance. To address this, some students suggested that employing more clinical instructors could improve support for students in their reflective practice journey. In support of this, other students expressed these sentiments:

> *"Yes, I want to add that it is indeed overwhelming to leave clinical teaching to qualified nurses. The idea of having clinical instructors in the wards is ideal. Just imagine that all nursing training institutions send their students to public health facilities and the*

wards are congested with students, on top of that each student wants support from the same qualified nurses mmmh… it is not easy like I remember one of the allocations at Ethel Mutharika Maternity nursery ward, we were 25 nursing students from different colleges and it was not easy to learn and for nurses to follow us all." (ID 5, Daeyang Uni.)

"I agree with my colleagues but if the college cannot manage to employ clinical instructors, then it would be much better for lecturers to be supporting students frequently like weekly. In addition, I feel reflective practice can work well with adequate resources. Currently improvisation is higher than provision in public health facilities and usually shortcuts are used to conduct procedures because resources are not available. And then you reflect on that procedure, search and write the best way to conduct it but the next time you want to perfect the skill there are no resources and end up doing the shortcut again… it's tough in the wards. May be in the near future the colleges will be required to buy resources for the learning of their students in public health facilities." (ID 4, Daeyang Uni.)

4.3 Conclusion

The study findings indicate that students have knowledge of reflective practice. The knowledge of reflective practice is largely gained in classrooms during their fundamentals of nursing.

The study also found that most students practice reflection when they can, but not regularly. Some of the key barriers to practice include time constraints, citing Gibb's Reflective Cycle model as lengthy and time consuming, in addition to not receiving adequate support in the clinical setting. Further, students concede to the importance of reflective practice for improving their clinical care outcomes.

In reference to clinical support, students from Mzuzu University significantly indicated that they do not receive support from nurses compared to Daeyang students who indicated that they receive more support. Opinions on qualified nurses' support showed that students are willing and consider it important to receive support, despite indicating that nurses are overworked to take their needs into account.

Recommendations from students regarding improving their reflective practice largely resounded on the need for universities to employ clinical instructors to assist students with clinical work such as reflective practice.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter discusses the results of Mzuzu University and Daeyang University's final year undergraduate nursing and midwifery students' experiences with reflective practice. The study findings indicated that students have a widespread knowledge of reflective practice. The study also found that majority of the students practice reflection though not regularly. Some of the key barriers to practice included time constraints and not receiving adequate support in the clinical setting. Further, students concede to the importance of reflective practice for improving their clinical care outcomes. Data from the survey and face to face interviews have been triangulated in this chapter.

5.1 Demographic Data

The demographic analysis of the study population provides valuable and significant insights into the composition and characteristics of final-year undergraduate Nursing and Midwifery students at both universities. These insights are critical for understanding the context within which the study was conducted, as they directly influence the interpretation of findings, particularly regarding reflective practice among these students.

The study revealed a notable gender disparity within the student population, with female students making up 70% of the participants compared to 30% for male students. While this ratio underscores the predominance of females in nursing and midwifery programmes, it is reflective of a broader global trend. Historically, these professions have been predominantly female-dominated, a pattern that persists in many educational institutions and professional settings to this day. This trend is not unique to the context of this study and it is mirrored in similar research. For example, Adams, (2018), in its examination of the knowledge and practices of third-year nursing students in Southern Africa, observed a larger proportion of female participants. The findings of this study align with such global and regional trends, emphasising the consistent demographic pattern in nursing and midwifery education. Despite this observed gender disparity, the study's results indicated that it did not significantly impact the findings, demonstrating that male and female students performed similarly in reflective practice measures.

Age emerged as another demographic variable of interest in this study. A significant difference in age distribution was observed participants from Daeyang University and participants from

Mzuzu University, with a statistical significance value of $P<0.001$. This indicates that the student populations of the two universities differ in their age profiles. However, similar to gender, age was found not to have a significant impact on the study findings. This aligns with prior research suggesting that age alone is not a determining factor in reflective practice or other related outcomes. For instance, Kaphagawani, (2015), in their study on clinical learning experiences among nursing students in Malawi, identified the duration of study rather than age as a more influential variable. Their research highlighted that whether a student was in their first, second, or third year of study had a greater bearing on their clinical learning experiences.

The focus of this study on final-year students is particularly relevant. By the fourth year of their programmes, students have typically undergone substantial clinical practice exposure, equipping them with a depth of experience that is essential for reflective practice. This targeted demographic contrasts with first-year students, whose limited clinical exposure may not yield insights directly inferential to the study's objectives. Therefore, restricting the study population to final-year students ensured that the findings are grounded in the context of those who are nearing the culmination of their academic training and are better prepared to engage in reflective practices critical for professional growth.

The study achieved an equitable representation of students from Mzuzu University (49.5%) and Daeyang University (50.5%), ensuring a nearly perfect balance between the two institutions. This balanced representation was vital for enabling a comprehensive comparison and analysis of how institutional factors might influence reflective practices among final-year nursing and midwifery students. By maintaining this proportionality, the study eliminated potential biases that could arise from overrepresentation or underrepresentation of participants from either institution.

The inclusion of students from both institutions provided a unique opportunity to explore the influence of varied institutional environments on reflective practices. Factors such as differences in clinical placement settings, the extent and nature of institutional support, the availability of mentorship programmes, and curriculum design may all contribute to shaping students' reflective experiences. For instance, disparities in clinical placement opportunities such as the type of healthcare facilities available, the patient demographics encountered, and the quality of supervision during placements could result in differing levels of exposure to real-world practice. Similarly, the support structures in place at each university, including faculty

engagement and access to reflective practice workshops or seminars, may play critical roles in fostering a culture of reflection.

The demographic characteristics of the study population provided an essential foundation for contextualising the reflective practices of final-year undergraduate nursing and midwifery students. The gender distribution, age variation, and balanced representation from both institutions collectively offered a deeper understanding of the factors influencing the students' experiences. For example, the age variation might hint at diverse perspectives brought into the reflective practices, while the gender distribution reflects broader trends in the nursing and midwifery professions.

This robust demographic foundation enabled the study to generate insights that were both institution-specific and applicable to the broader nursing education landscape. By addressing these demographic variables, the study not only strengthened the reliability and relevance of its findings, but it also laid the groundwork for future research. It underscores the importance of considering demographic and institutional factors in designing studies that aim to evaluate and improve reflective practice.

For future research, these demographic variables should remain a focal point. Investigating their interaction with reflective practice could enhance the generalisability and applicability of findings across diverse nursing education contexts. Moreover, longitudinal studies examining the role of institutional policies and clinical placement quality in shaping reflective practice would further contribute to the evidence base for advancing nursing and midwifery education.

5.2 Knowledge of Reflective Practice

The study results showed that more than 98% of the students were knowledgeable about reflective practices. The result is quite significant. This high percentage suggests that reflective practices are likely integrated into the students' learning processes, which is often a sign of an educational environment that prioritises self-awareness and critical thinking. Most students responded that reflective practice is a process of reviewing past actions, whether right or wrong, to learn and improve future practice. This aligns with Dewey's (1933) concept of reflection as "active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends." The responses also suggested that students perceived reflection as a means of critically analysing clinical

situations, which echoes Schön's (1983) notion of reflection-in-action and reflection-on-action in which professionals reflect during and after an event to improve practice (Austin et al., 2020).

The variation in definitions among students indicated a lack of a unified understanding of reflective practice, which may stem from differences in how the concept is taught and reinforced in their respective colleges. Mentorship and role modeling by experienced practitioners have been identified as crucial enablers of effective reflective practice (Bulman et al., 2020). Some students associated reflective practice with critical thinking, which is consistent with the literature that posits reflection as a tool for developing critical thinking skills (Bass et al., 2019; Bijani et al., 2021; O'Brien & Graham, 2020). This suggests that, while students recognise the importance of reflection, there is a need for clearer and more consistent teaching approaches to ensure that all students have a comprehensive understanding of what reflective practice entails. The literature emphasises the importance of integrating reflective practice into nursing and midwifery education to foster professional growth and improve clinical competence (Barbagallo, 2020; McCarthy et al., 2021; Smith, 2021). This supports the argument that the quality and depth of reflective practice are influenced by how well the concept is taught and integrated into clinical training (Adam et al., 2021; Bass et al., 2019).

The diverse definitions of reflective practice highlight the need for clear and consistent teaching of its concepts and benefits. Educators should ensure that students understand the various dimensions of reflective practice and how it can be applied to enhance their professional development. Reliance on formal education settings for learning about reflection suggests that educators play a crucial role in fostering reflective skills. Therefore, nursing programs should prioritise training educators in effective methods for teaching and facilitating reflective practice.

Similarly, qualitative data highlighted the diverse perspectives of final-year undergraduate nursing and midwifery students regarding reflective practice (RP), revealing nuanced understandings that underscore both the strengths and gaps in their conceptualisations. The findings align with existing literature, which suggests that reflective practice is both a personal and a professional tool essential for continuous learning and improvement in healthcare settings (Artioli et al., 2021).

The participants' understanding of reflective practice centered around three dominant interpretations: retrospective analysis, scenario-based evaluation, and critical thinking, each of which is explicated below.

Retrospective Analysis

Several students described reflective practice as a retrospective process, involving reviewing past actions to evaluate and re-plan. This aligns with Schön's concept of "reflection-on-action," where practitioners critically assess completed experiences to improve future performance (Schön, 1983). These narratives, such as "reflecting on what you did, wrong or right," resonate with the notion that reflection fosters self-awareness and accountability in professional practice. However, the emphasis on looking back suggests that some students may be underutilising the more dynamic "reflection-in-action," which occurs in real-time and is crucial in high-stakes clinical settings (Bulman et al., 2020).

Scenario-Based Understanding

Other students framed reflection as a scenario-based understanding, focusing on unique events and analysing how procedures were handled, including recognising team contributions. This perspective demonstrates an awareness of the collaborative nature of healthcare, where learning extends beyond individual performance to include team dynamics. Such views align with theories emphasising situational learning and experiential education, such as Kolb's Experiential Learning Cycle, which highlights the importance of reflecting on specific experiences to develop actionable insights (Kolb, 1984).

Critical Thinking

The interpretation of reflective practice as critical thinking reflects deeper engagement with the analytical aspects of reflection. Students describing reflective Practice as "thinking critically about something one has done" underscore its value as a cognitive process for learning and improvement. This aligns with Mezirow's Transformative Learning Theory, where critical reflection is essential for challenging assumptions and fostering growth (Mezirow, 1991). However, the narratives reveal variability in the depth of critical engagement, suggesting that not all students consistently apply this holistic and analytical approach.

The findings suggest a need for targeted educational interventions to deepen students' understanding of reflective practice and its applications. While most students recognise the importance of reflection, there is variability in how they conceptualise and apply it. For instance, the emphasis on retrospective analysis may indicate a gap in integrating real-time reflective practices, which are critical for dynamic clinical decision-making (Barbagallo, 2020).

The findings reveal varying perspectives among final-year nursing and midwifery students regarding the source and process of learning reflective practice. These differences are shaped by disparities in educational delivery, the integration of theoretical and practical components, and individual resourcefulness. The observations underscore significant educational gaps that affect the students' understanding and application of reflective practice, mirroring themes from existing research on reflective practice education.

Many students from Mzuzu University reported learning about reflective practice through formal lessons, particularly during their foundational years in nursing education. For instance, the structured introduction of Gibbs' Reflective Cycle provided a clear framework, emphasising its steps and the importance of systematic reflection. Gibbs' Model is widely recognised in healthcare education for its practical application and ease of use in guiding reflective writing (Gibbs, 1988). However, students highlighted challenges in transitioning this theoretical knowledge into clinical practice, with some perceiving reflective practice as a theoretical construct rather than a practical tool.

The notion that reflective practice was treated as *"just another lesson"* reflects a potential missed opportunity to embed reflective practice as a core skill integral to clinical reasoning and professional growth. Research emphasises the need for experiential learning activities such as role-playing, reflective journaling, and case discussions, to bridge the gap between theory and practice (Alsalamah et al., 2022; Scheel et al., 2021).

The disconnect between what students learned in the classroom and what was expected in clinical placements emerged as a significant issue, particularly for students from Daeyang University. For example, students reported that reflective practice was *"mentioned in passing"* rather than taught as a dedicated topic. This lack of emphasis contributes to a theory-practice gap, a common issue in nursing education where students struggle to apply classroom knowledge in real-world clinical settings (Contreras et al., 2020).

Students who relied on the internet or peers to supplement their learning highlight the importance of self-directed learning. While this demonstrates adaptability, it also underscores inconsistencies in the curriculum. The disparity in teaching approaches between institutions raises questions about standardised delivery of reflective practice education in nursing programmes. A systematic review by Bulman et al., (2020) identified comprehensive and consistent teaching of reflective practice as critical for student competence, suggesting that formal curricula should integrate RP as a longitudinal, scaffolded component.

Clinical placements were another key source of learning reflective practice. However, students noted a lack of role modeling by qualified nurses, which undermined their ability to see reflection as a practical, actionable process. One student described reflective practice as *"just theory"* until prompted by a lecturer to write a reflective account at the end of a clinical placement. This observation aligns with findings from other studies, which emphasise that qualified nurses' involvement in reflective activities plays a pivotal role in helping students to internalise and practice reflection (Balabanova et al., 2021; Boyd, 2023; Shin et al., 2023).

The expectation for students to independently write reflective essays during clinical placements, despite minimal preparatory guidance, further highlights the gap between academic and clinical education. When reflective practice is introduced only as a post-hoc task rather than a routine process integrated into daily practice, students are less likely to appreciate its value (Smith, 2021).

For Daeyang University students, informal learning sources, such as the internet and peer collaboration, compensated for the lack of formal instruction. This aligns with the increasing role of digital resources in modern education, where online platforms provide accessible and diverse perspectives on reflective models and practice. However, reliance on such self-directed learning methods can lead to inconsistencies in understanding and application (Bulman et al., 2020). To ensure quality, educators must guide students toward credible resources and scaffold their learning within the curriculum.

These findings underscore several critical implications for nursing education. The first one is: Standardisation of Reflective Practice Education

Nursing and midwifery educational institutions must adopt a consistent approach to teaching reflective practice. Incorporating structured lessons on reflective frameworks, such as Gibbs'

Reflective Cycle or Kolb's Experiential Learning Model, across all years of study ensures foundational knowledge and builds reflective capacity over time.

The second implication is bridging the Theory-Practice gap.

Greater emphasis is needed on experiential learning and integration of reflective practice into clinical placements. Structured mentorship and reflective debriefing sessions, facilitated by clinical educators, can help students apply theoretical concepts in real-world scenarios (Bulman et al., 2020).

The last implication is role modeling by qualified nurses

Promoting reflective practice among practicing nurses is essential for creating a culture of reflection in clinical settings. Students benefit from observing and participating in reflective processes alongside experienced practitioners, which fosters practical learning and professional growth (Aziz et al., 2020; Noora Ahmed et al., 2024).

Qualitative results revealed students' recognition of reflection as extending beyond clinical settings, by highlighting its relevance to broader aspects of professional and personal growth. Encouraging this holistic view can help foster lifelong learning and resilience in healthcare professionals The findings from this study underscore the profound impact of reflective practice (RP) on professional and personal development among final-year undergraduate nursing and midwifery students. Participants identified various benefits, including improved patient care, enhanced learning, critical thinking, and emotional maturity. These findings align with the growing body of literature that underscores the importance of reflective practice as a transformative tool in healthcare education and practice (Artioli et al., 2021; Balabanova et al., 2021; Barbagallo, 2020).

Students consistently highlighted the role of reflective practice in enhancing patient care and treatment. Reflecting on past experiences, particularly challenging cases, allows practitioners to identify areas for improvement and develop strategies for future encounters. This iterative process contributes to refined clinical skills and decision-making, as noted in studies emphasising reflective practice as a key to improving the quality of care (Bulman et al., 2020; O'Brien & Graham, 2020). Reflection also fosters a patient-centered approach by encouraging healthcare professionals to evaluate their actions and outcomes critically. This iterative

learning is critical in advancing evidence-based practice, where practitioners continuously adapt to improve patient outcomes (Schön, 1983).

Participants described reflection as a "guide or reference" that helps them to learn from past events and informs future decision-making. This aligns with Kolb's Experiential Learning Theory, which emphasises the cyclic nature of learning through experience, reflection, conceptualisation, and experimentation (Kolb, 1984). By reflecting on clinical experiences, students consolidate knowledge, prevent errors, and deepen their understanding of complex clinical situations. Group reflection emerged as a key aspect, enabling students to learn from peers and enhance collective problem-solving. Collaborative reflection is widely recognised as a valuable learning strategy in nursing education, as it promotes knowledge sharing and exposes learners to diverse perspectives (Graham & O'Brien, 2020; Adam et al., 2021).

The ability to think critically about clinical practice is another benefit emphasised by the participants. Reflective practice fosters critical analysis by encouraging practitioners to question their actions, consider alternative approaches, and evaluate outcomes. This aligns with research indicating that reflection sharpens analytical skills and supports the development of clinical reasoning, an essential competency in nursing practice (Austin et al., 2020). In emergency situations, critical thinking becomes even more vital. Reflective practice prepares students to act decisively and thoughtfully under pressure, enhancing their capacity to manage complex and dynamic clinical scenarios effectively (Contreras et al., 2020).

Emotional maturity emerged as a significant benefit of reflective practice, with students describing how reflection helped them process challenging emotions, such as grief over patient loss. By engaging in reflective processes, participants reported developing resilience and emotional intelligence, enabling them to provide compassionate care without compromising professionalism. This aligns with studies that identify reflective practice as a mechanism for emotional regulation and coping in healthcare settings (Aziz et al., 2020; Barbagallo, 2020; McCarthy et al., 2021; Reljic et al., 2019. Emotional intelligence, a key attribute developed through reflection, is associated with improved communication, empathy, and stress management, all of which are critical in nursing practice (Azmi et al., 2024) Reflective practice also helps healthcare workers to navigate moral and ethical challenges by providing a structured approach to analysing and reconciling difficult experiences (Nukpezah et al., 2021).

The benefits identified in this study highlight the importance of embedding reflective practice into nursing education and clinical training. Strategies for maximising these benefits include the following;

Structured reflection activities: This include incorporating models such as Gibbs' Reflective Cycle to ensure a systematic approach to reflection. Structured activities should be integrated into both classroom and clinical settings to create a seamless transition between theory and practice (Bulman et al., 2020).

Promoting Collaborative Reflection: Facilitating group reflection sessions which encourages peer learning and exposes students to diverse perspectives. This approach not only enhances individual learning, but it also fosters teamwork and collaborative problem-solving and essential skills in multidisciplinary healthcare environments (Graham & O'Brien, 2020).

Fostering Emotional Resilience: Reflection should be positioned as a tool for emotional development, with educators providing support for students to process challenging experiences. Incorporating reflective debriefings after critical incidents can help students manage stress and develop coping strategies (Aziz et al., 2020).

Embedding Reflective Practice in Professional Development: Beyond education, reflective practice should be encouraged as a lifelong professional habit. Educational institutions and healthcare organisations can promote a culture of reflection by incorporating it into professional development programmes and performance evaluations (Artioli et al., 2021).

This study demonstrates that reflective practice offers multifaceted benefits, ranging from improved patient care and clinical skills to critical thinking and emotional resilience. By enabling students to learn from experience, reflect critically, and adapt their practices, reflective practice is an invaluable tool for personal and professional growth in nursing and midwifery. Educational institutions and healthcare organisations should prioritise reflective practice as a core component of their curricula and training programmes to prepare competent, empathetic, and resilient healthcare professionals.

Overall, it can be said that reflective practice offers a wide variety of benefits to practicing nurses and it is seen as a continuing process that one constantly evolves from. The importance of reflective practice was not lost to students thereby suggesting that there is a high likelihood

of actual practice. The study therefore, further sought to analyse the frequency in practicing reflection and barriers to the same as discussed in the proceeding subsections.

The findings of this study align with literature emphasising the multifaceted nature of reflective practice. For example, Balabanova et al., (2021) highlighted the role of RP in developing clinical reasoning and professional competence. However, like this study, they identified gaps in students' understanding of its theoretical underpinnings. Similarly, a study by Kinsella et al., (2022) noted that while students value reflective practice, they often struggle to apply it consistently due to limited guidance and support.

5.3 Practice of Reflection

Reflective practice is a cornerstone of nursing education and professional development, enabling practitioners to critically evaluate their actions and improve patient care outcomes (Contreras et al., 2020). In this study, almost all participants, 99 (98%) reported practicing reflection. This high engagement rate underscores the importance of reflective practice in nursing education and its perceived value among students. The results demonstrated that students were able to engage in reflective practice after learning the basic frameworks from the beginning of their studies.

Reflective practice serves as a foundational element in nursing education and professional growth, fostering a culture of continuous learning and improvement among practitioners (Azmi et al., 2024; Bulman et al., 2020). By engaging in reflective practice, students critically assess their own actions, decision-making processes, and outcomes. This process not only enhances their ability to identify areas for improvement, but it also drives the delivery of high-quality, patient-centred care, ensuring better health outcomes for those they serve (Contreras et al., 2020).

In this study, nearly all respondents (98%, n=99) indicated that they actively engaged in this activity. This exceptionally high rate of participation highlights the integral role of reflective practice within Mzuzu University and Daeyang University, as well as the value it holds for students as they develop their professional identities. The findings underscore how reflective practice is not merely an academic exercise, but a critical tool that nursing students and professionals alike rely on for their personal and professional development.

The study further revealed that nursing students successfully adopted reflective practice after being introduced to foundational frameworks early in their education. This structured introduction provided them with the tools and strategies needed to integrate reflective thinking into their routine practices (Graham & O'Brien 2020). By embedding reflective practice into their studies from the outset, students were able to develop a habit of self-assessment and continuous learning, which is essential for adapting to the dynamic nature of healthcare environments. These results underscore the importance of integrating reflective practice into the core curriculum of nursing programmes. Doing so not only equips future nurses with critical thinking and self-evaluation skills but also ensures that reflective practice becomes an ingrained part of their professional ethos. Ultimately, this contributes to the advancement of nursing as a profession and enhances the overall quality of patient care.

A substantial proportion of participants (73.3%) reported that engaging in reflection has a direct impact on shaping their future actions and interventions. This notable finding underscores the transformative power of reflective practice in professional and educational contexts. It aligns closely with existing research, which highlights how reflective practice fosters self-regulated learning and encourages critical evaluation (Bass et al., 2020; Peixoto & Peixoto, 2016). These processes are vital for enabling individuals to refine their decision-making capabilities and adapt strategies to achieve better outcomes (Al-Kofahy & James, 2017; Bulman et al., 2020; Marshall et al., 2022; Parwanda, 2022). By creating opportunities for individuals to think deeply about their experiences, reflective practice serves as a critical tool for growth and improvement.

This result also resonates strongly with Kolb's Experiential Learning Theory, which positions reflection as an integral component of the learning cycle. According to Kolb, the iterative process of reflecting on experiences, conceptualising insights, and experimenting with new approaches contributes significantly to enhanced learning outcomes. This theory emphasises that learning is a dynamic and ongoing process, deeply enriched by the deliberate act of reflection.

Recent studies further support the idea that reflective practice enables individuals to critically analyse their past experiences, which in turn cultivates more effective problem-solving skills and sharper decision-making abilities (Graham & O'Brien, 2020; Horton-Deutsch &

Sherwood, 2023). Reflective practitioners do not only enhance their capacity to tackle complex situations, but they also develop the insight required to identify gaps in their knowledge or practices. This proactive identification of areas for improvement allows them to implement meaningful changes that drive progress.

The findings are consistent with Dewey's concept of reflective thinking, which he described as an active, persistent, and careful consideration of beliefs or knowledge (Dewey, 1933). Reflective thinking involves a deliberate effort to explore experiences, question assumptions, and generate new understandings. Through this process, individuals can make informed and thoughtful decisions, improving their professional practice and contributing to their personal development.

Ultimately, these findings reinforce the importance of integrating reflective practice into both educational and professional settings. By emphasising its value in fostering self-awareness, critical thinking, and continuous improvement, educators and practitioners alike can harness its potential to drive meaningful growth and success (Donohoe, 2022).

Emotional maturity and confidence were also notable motivators, with 32.7% and 33.7% of participants, recognizing these benefits. Reflection helps individuals process negative events and build resilience, as supported by literature (Alsalamah et al., 2022; Aziz et al., 2020; McLeod et al., 2020). As supported by Noora Ahmed et al., (2024) on emotional intelligence, these skills are critical in both personal and professional growth. Furthermore, reflective confidence has been shown to improve self-efficacy, an essential attribute for achieving success (Harerimana, 2018; Karimi et al., 2017; Pretorius & Ford, 2016)

The most frequently observed outcome of engaging in reflective practice was the modification of future actions, reported by 71.3% of participants. This finding highlights the practical and transformative benefits of reflection in fostering professional competence and enhancing the quality-of-care delivery. By critically evaluating their experiences, practitioners gain valuable insights that enable them to refine their approaches, address shortcomings, and implement more effective interventions (Bijani et al., 2021; Ekelin et al., 2021; Saab et al., 2020).

The data further revealed that reflective practitioners reported significantly better care outcomes (84.2%) compared to their counterparts who did not engage in reflective practices. This striking disparity underscores the tangible impact of reflection on clinical and professional

performance. Engaging in reflective practice allows practitioners to bridge the gap between theoretical knowledge and real-world application, leading to improved patient outcomes and overall healthcare quality (Richard et al., 2019). These findings align with a growing body of evidence from clinical settings, where reflection is increasingly recognised as a powerful tool for refining healthcare delivery (Austin et al., 2020; Gilheaney & Quigley, 2021; Oluwatoyin, 2015; Patel, 2023). For example, research by Gilheaney & Quigley, (2021) emphasises that practitioners who engage in reflective practice demonstrate enhanced diagnostic accuracy, stronger patient communication skills, and heightened empathy. These attributes are essential for building trust, fostering patient-centered care, and achieving superior clinical outcomes.

Moreover, reflective practice enables practitioners to identify gaps in their knowledge, question assumptions, and continuously adapt to the dynamic and evolving nature of healthcare. By doing so, they cultivate a mindset of lifelong learning and professional growth. This iterative process of reflection and improvement ensures that practitioners are better equipped to meet the complex challenges of modern healthcare environments (Contreras et al., 2020).

These findings advocate for the integration of reflective practice into professional training and ongoing development. By embedding reflection as a core component of healthcare education and professional practice, organisations can empower practitioners to deliver consistently high standards of care, resulting in better patient experiences and more effective healthcare systems.

The qualitative results emphasise the substantial impact of reflective practice on both the personal and professional growth of final-year undergraduate nursing and midwifery students. This practice is consistently portrayed as a critical tool for promoting continuous learning and preventing the repetition of errors (Mgbekem et al., 2016). By thoroughly analysing their past experiences, students do not only gain fresh insights, but they also expand their knowledge base. According to Nukpezah et al., (2021), this reflective process bridges the often-challenging gap between theoretical learning and practical application, enabling students to refine their approaches and deepen their understanding of complex concepts in real-world scenarios.

The participants expressed a clear sentiment that engaging in reflective practice equips them to avoid recurring mistakes while simultaneously inspiring innovative and creative approaches to patient care. This reinforces the pivotal role that reflection plays in enhancing professional

competency, as it encourages students to think critically, adapt strategies, and improve their decision-making processes (Patel, 2023).

Additionally, the narratives underscore the direct correlation between reflective practice and improved patient outcomes. Students consistently highlighted that reflection sharpens their practical skills, heightens their clinical awareness, and enables them to deliver care that is truly patient-centered. This process allows them to adapt their care strategies to meet the unique needs of each individual, fostering a more compassionate, empathetic, and personalised approach to healthcare (Boyd, 2023).

Furthermore, reflective practice facilitates self-awareness and encourages students to evaluate their emotional responses to challenging situations. By recognising and processing these responses, they become more resilient and better equipped to handle the emotional demands of their profession. This emotional intelligence further strengthens their ability to connect with patients and deliver high-quality, empathetic care (Gordon, 2019).

In essence, these qualitative findings affirm the indispensable role of reflective practice in nursing and midwifery education. It not only supports students in their journey toward becoming competent and compassionate practitioners, but it also contributes to the broader goal of improving healthcare delivery and patient satisfaction (Artioli, et al., 2021). By embedding reflection into their routine practices, students build a strong foundation for lifelong learning and professional excellence.

In addition, the results emphasise the development of emotional intelligence as a key benefit of reflective practice. Reflection allows students to identify their strengths and weaknesses, encouraging emotional maturity (Miraglia & Asselin, 2015; Mirlashari et al., 2017). They describe how reflecting on emotionally challenging situations like patients' deaths has transformed their coping mechanisms. Instead of being emotionally overwhelmed, they develop resilience and empathy, which are essential qualities for nursing professionals.

Moreover, through reflection, students demonstrate a commitment to personal and professional growth. They adapt their behaviours, acknowledge their mistakes, and strive to improve relationships with colleagues and patients. The example of practicing remorse and apologising when needed illustrates how reflection fosters ethical and considerate behaviour.

These outcomes underline the multifaceted benefits of reflective practice for nursing and midwifery students. It not only advances their technical and interpersonal skills but also nurtures their growth as empathetic, adaptable, and self-aware professionals. These findings highlight the importance of embedding reflective practices in healthcare education to cultivate emotionally intelligent and patient-focused practitioners.

Almost all participants (99%) acknowledged that reflective practice influences their perception of situations, highlighting its role in fostering metacognitive awareness and deeper understanding. Most participants (89.1%) observed differences between themselves and non-practitioners, suggesting that reflective practice provides a unique lens through which individuals perceive and approach situations. This echoes findings in other studies where reflective employees are shown to be more adaptable and proactive (Gilheaney & Quigley, 2021; Patel & Metersky, 2022).

Notably, none of the participants regretted practicing reflection. This finding is supported by a meta-analysis showing that while reflection requires cognitive and emotional effort, it rarely yields negative consequences (Barbagallo, 2020). Instead, it often results in a greater sense of personal and professional fulfillment.

The results underscore the transformative impact of reflective practice in fostering learning, emotional intelligence, and improved outcomes (Gilheaney & Quigley, 2021). These findings highlight the need to integrate reflective practice into curricula and professional development programmes across nursing programmes. Future research could explore the long-term effects of reflective practice and its potential to mitigate challenges in complex, high-stakes environments.

The qualitative findings highlight several key factors enabling nursing and midwifery students to engage in reflective practices. These factors include challenging situations, positive outcomes, critical decision-making, and institutional requirements. Each of these factors is clarified below.

Challenging Situations and New Scenarios: Students often reflect when faced with difficult or unfamiliar cases, as these moments demand problem-solving and critical thinking. Reflection in such contexts helps students to identify solutions and improve patient care. According to the Nurses and Midwifery Council of Malawi (NMCM), reflection is essential

for making sense of complex situations and fostering professional growth. Schon's Model of Reflection emphasises "reflection-in-action" (thinking on your feet) and "reflection-on-action" (analysing past events), both of which are evident in the students' narratives.

Difficult or novel scenarios were particularly significant as they encouraged self-evaluation and problem-solving. This aligns with Schön's Theory of the Reflective Practitioner, which posits that professionals learn by reflecting on unique or challenging experiences to improve their practice (Schön, 1983). Additionally, positive events provided opportunities to analyze successful outcomes and reinforce best practices, consistent with Kolb's Experiential Learning Theory, which emphasises learning from both successes and failures (Kolb, 1984).

Positive Outcomes as Triggers for Reflection: Reflection on positive events such as successful patient recoveries, allows students to consolidate effective practices and prepare for similar future cases. This aligns with the idea that reflection is not only about addressing challenges but also about reinforcing successful strategies. Literature highlights how reflective practices can enhance learning by enabling students to critically analyse both successes and areas for improvement (Barbagallo, 2020; Nukpezah et al., 2021; Scheel et al., 2021).

Critical Decision-Making: Reflecting during critical decision-making processes is crucial for ensuring patient safety and delivering patient-centered care. This practice fosters self-awareness and thoughtful consideration, which are vital for professional development. Contreras et al., (2020); McCarthy et al., (2021) & Smith, (2021) discuss how reflective practice helps nurses and midwives navigate complex clinical decisions while addressing unconscious biases.

Institutional Requirements: The requirement to reflect during clinical placements, often using structured models like Gibbs' Reflective Cycle, ensures that students engage in systematic reflection (Bulman et al., 2020). This approach does not only meet academic objectives, but also instil a habit of reflective thinking. Structured reflection helps students to integrate theoretical knowledge with practical experiences. However, reliance on external motivators, such as academic tasks, suggests that fostering intrinsic motivation for reflective practice should be prioritised. Educators and clinical mentors play a vital role in nurturing this intrinsic motivation by demonstrating the practical value of reflection in improving patient care and professional competence (Gordon,2019).

These findings explain the multifaceted nature of reflection in nursing and midwifery education. Reflection is not merely a response to challenges, but a comprehensive tool for learning, growth, and improving patient care (Weller-Newton & Drummond-Young, 2023; Richard et al., 2021). It is shaped by both intrinsic motivations (e.g., personal growth, critical thinking) and extrinsic factors (e.g., institutional requirements).

When compared, both the narratives and statistical results emphasise the role of challenging situations in triggering reflection. In the qualitative data, students shared personal experiences of reflection initiated by difficult scenarios or critical decisions. Quantitative data supports this, showing that 73.3% of students practice reflection to shape future actions or interventions—a key motivation tied to overcoming challenges. Positive outcomes as triggers are also present in both sets of data. Narratives highlight reflection following successful patient recoveries, while 48.5% of students in the statistics attribute their reflection to satisfactory outcomes.

Further, modifying future actions is a consistent theme across narratives and statistics. This outcome is strongly supported by the quantitative data, with 71.3% of students reporting it as a key result of their reflective practices. The qualitative narratives provide additional nuance by emphasising personal and professional growth, while the statistics highlight enhanced emotional strengths (4.9%)—a category less pronounced in the narratives.

The narratives and data agree that reflective practice significantly shapes students' perceptions and contributes to better care outcomes. Quantitative results indicate 100% agreement among Daeyang students and 98% among Mzuzu students that reflective practice influences situational perception. Similarly, 89.1% of students noted differences between themselves and peers who do not reflect—an observation echoed in the qualitative accounts, where reflection is portrayed as integral to professional development.

5.4 Barriers to Reflective Practice

Reflective practice is a cornerstone of professional growth and learning, particularly in clinical education, where students face complex situations that require critical thinking and self-awareness. The findings of this study reveal several significant barriers that impede reflective practice among students at Mzuzu university and Daeyang University. These barriers, while context-specific, have broader implications for clinical education and the preparation of future healthcare professionals. Reflective practice is widely acknowledged as a fundamental

component of professional development in nursing and midwifery (Barbagallo, 2020; Boyd, 2022; Shin et al., 2020).

Prevalence of Failure to Reflect

The high prevalence of students reporting challenges in engaging with reflective practice (90.1%) underscores the pervasive nature of barriers in clinical settings. Reflection requires not only cognitive effort but also emotional and logistical support, which appears to be lacking for many students. This finding aligns with prior research that highlights how unstructured or unsupportive learning environments can limit opportunities for reflection (Mbakaya et al., 2020; Mhango et al., 2021; Panda et al., 2021). Moreover, the small proportion of students (9.9%) who have consistently managed to reflect suggests that structural or individual differences may play a role such as access to resources or personal resilience.

Unsupportive Clinical Learning Environment

The most commonly cited barrier, reported by 52.5% of respondents, was an unsupportive clinical learning environment. This reflects systemic issues within clinical education settings, such as lack of mentorship, hierarchical structures that discourage open communication, and the absence of formal reflective sessions. Studies have shown that when clinical supervisors actively encourage reflection, students are more likely to engage in the practice (Adam et al., 2021; Gordon, 2019). However, in the absence of guidance, students may struggle to prioritize or understand its relevance. Clinical settings are often characterised by time-sensitive decision-making, which can marginalise reflective activities (Artioli et al., 2021). Additionally, hierarchical dynamics may inhibit students from expressing vulnerabilities or acknowledging mistakes, both of which are crucial for meaningful reflection Gilheaney & Quigley, 2021).

Literature demonstrates that the role of clinical supervisors is pivotal in fostering a culture of reflection (Patel & Metersky, 2022). When supervisors actively encourage and model reflective practice, students are significantly more likely to engage in the process and derive its benefits (Adam et al., 2021; Rothwell et al., 2021). This support not only validates the practice but also helps students to see reflection as a valuable tool for their growth. Conversely, the absence of such guidance leaves students feeling unsupported, making it challenging for them to integrate reflection into their routines Brbagallo, 2020).

Another pressing issue in clinical settings is the prevalence of time-sensitive decision-making, which often takes precedence over reflective activities. The fast-paced nature of healthcare environments leaves little room for deliberate, thoughtful analysis of experiences (Contreras et al., 2020). As a result, reflection may be relegated to a lower priority despite its critical role in improving professional competence and care delivery.

Hierarchical dynamics within clinical settings also present a significant barrier to reflective practice (Austin et al., 2020; Richard et al., 2019). Students may feel hesitant to express their vulnerabilities, acknowledge mistakes, or discuss areas for improvement, particularly when they perceive a power imbalance with their supervisors or senior staff. Yet, openness and honesty about challenges are essential for meaningful reflection and personal growth. These dynamics can stifle the development of self-awareness and inhibit the deeper introspection needed for effective learning.

Moreover, the lack of formalised structures or sessions dedicated to reflection exacerbates these challenges. Without designated time and space for reflective discussions, students may struggle to incorporate the practice into their learning experience. This lack of institutional prioritisation signals to students that reflection is not a fundamental aspect of clinical education, further diminishing its perceived value (Azmi et al., 2024).

Addressing these barriers requires systemic changes within clinical education settings. Encouraging a culture of mentorship, fostering open communication, and integrating structured reflective sessions into clinical training can significantly enhance students' ability to engage in reflective practice. Additionally, educating clinical supervisors on the importance of promoting reflection and creating psychologically safe environments can empower students to embrace the practice fully. By addressing these systemic issues, educators and healthcare institutions can ensure that reflective practice becomes an integral and meaningful part of professional training.

Inability to Identify Reflective Opportunities

Approximately one-third (33.6%) of respondents reported difficulty in identifying appropriate events or situations to reflect upon. This highlights a critical skill gap: the inability to discern meaningful experiences that warrant deeper analysis. This challenge underscores the importance of intentional training in recognising teachable moments, particularly during

clinical rotations where real-world experiences provide a rich but complex environment for reflection (Contreras, 2020). Reflective practice relies on the practitioner's ability to identify experiences that have significant learning potential. However, without adequate preparatory instruction, students may struggle to determine what constitutes a reflective opportunity Mgbekem et al., 2016). This skill gap may stem from a lack of emphasis on reflective techniques, leaving students unsure of how to connect their everyday clinical experiences to broader concepts of learning and improvement. Moreover, in fast-paced healthcare environments, subtle yet impactful experiences may go unnoticed, further exacerbating this issue (Marshall et al., 2022; Nukpezah et al., 2021).

To address this challenge, institutions can play a pivotal role by incorporating structured frameworks for reflection into their educational programmes. Approaches such as Gibbs' Reflective Cycle and the Kolb's Learning Cycle offer systematic methods for identifying, analysing, and learning from experiences. Gibbs' Reflective Cycle, for instance, encourages students to work through their experiences step by step, exploring feelings, evaluating actions, and planning future improvements. Similarly, Kolb's Learning Cycle provides a four-stage process—experience, reflection, conceptualisation, and experimentation—that helps students transform observations into actionable insights. These models not only provide guidance but also instill confidence in students to approach reflection with purpose and clarity (McLeod,2019).

Additionally, clinical supervisors and educators can facilitate this process by modeling reflective behaviours and creating opportunities for discussions around teachable moments (Adams, 2018; O'Brien & Grahm, 2020). For instance, post-clinical debriefings can serve as a platform for students to share experiences, receive feedback, and collaboratively identify reflection-worthy events. By fostering an environment where students feel encouraged to discuss their experiences openly, educators can help them develop the awareness needed to recognise these opportunities independently (Ticha & Fakude, 2015).

Ultimately, addressing this barrier requires a concerted effort from educational institutions, clinical supervisors, and students themselves. With targeted training, supportive mentorship, and the integration of structured reflective frameworks, students can develop the crucial skill of identifying reflective opportunities, enriching their learning and enhancing their professional development Bass et al., 2021; McCarthy et al., 2021).

Lack of Time

Time constraints were reported by 31.7% of respondents, highlighting the significant challenge posed by competing priorities in the lives of clinical students. In fast-paced healthcare settings, where efficiency and immediate decision-making are often prioritised, the reflective process which demands both cognitive and emotional engagement is frequently overlooked Artioli et al., 2021; Gilheaney & Quigley, 2021). Reflective practice, while invaluable for fostering professional growth and improving care quality, requires time for thoughtful analysis, self-assessment, and synthesis of lessons learned (Alkofahy & James, 2017; Bulman et al., 2020; Marshall et al., 2022). The demands of clinical rotations, coupled with academic responsibilities, leave students with little opportunity to engage in such introspective activities.

One of the root causes of this barrier is the overloaded curricula in clinical education, which tends to emphasise the acquisition of technical and procedural knowledge over the development of reflective skills Alsalamah et al., 2022; Gaeeni et al., 2021). While these technical competencies are undeniably critical, the lack of balance between task-oriented training and reflective thinking can marginalise the value of introspection (Adams et al., 2021; Parwanda, 2022). Without adequate time allocated for reflection, students may struggle to fully integrate their clinical experiences into their broader learning journey, limiting the depth of their professional development.

According to Artioli et al., (2021), integrating reflective practice into regular coursework or clinical debriefing sessions offers a practical solution to this issue. Structured activities such as guided journaling, small group discussions, or post-clinical reflections can be seamlessly incorporated into the curriculum to ensure students have the time and space to engage in meaningful self-assessment (Beiranvard et al., 2021; Momennasab et al., 2021). These practices do not only alleviate the time-related barriers, but they also normalise reflection as an essential component of clinical education.

Institutional support plays a pivotal role in addressing this challenge. For example, incorporating "protected time" within clinical schedules, specific intervals reserved for reflective activities can enable students to engage in introspection without feeling the pressure to compromise other responsibilities (Richard et al., 2019; Smithh, 2021). Protected time demonstrates an institutional commitment to cultivating reflective skills and signals their importance in fostering holistic professional development.

Additionally, leveraging technology can provide innovative solutions for facilitating reflection amidst time constraints (Kinsella et al., 2022; Zhang et al., 2022). For instance, mobile applications or digital platforms that allow students to record quick reflective notes during or immediately after clinical shifts can serve as practical tools for capturing insights in real time. These tools can later be revisited for deeper analysis during designated reflection periods.

Another crucial consideration is fostering a culture of reflection within healthcare institutions. Educators, clinical supervisors, and organisational leaders must emphasise the significance of reflective practice and model its application in their own professional roles (Karnieli-Miller, 2020). When students witness reflection being valued and practiced by their mentors, they are more likely to prioritise it themselves despite competing demands.

Addressing the time-related barriers to reflective practice requires a multifaceted approach involving curriculum redesign, institutional support, and cultural shifts. By integrating reflection into the daily fabric of clinical education, students can better balance their responsibilities while reaping the benefits of this invaluable practice. In doing so, they will be more prepared to grow as competent, self-aware, and empathetic professionals, ready to navigate the complexities of modern healthcare Ekelin, 2021; Noora Ahmed et al., 2024).

Emotional Consequences

The emotional toll associated with reflective practice emerged as a significant barrier, reported by 31.7% of students. Engaging in reflection often involves revisiting challenging or distressing situations such as clinical errors, moral dilemmas, or interactions with patients in emotional or critical states (Parwanda, 2022; Scheel et al., 2021). These reflective processes can evoke feelings of anxiety, guilt, frustration, or even self-doubt, impacting students' mental well-being and their ability to engage fully in the practice (Artioli., 2021).

The emotional impact of reflective practice underscores the importance of fostering a supportive and psychologically safe environment within clinical and educational settings. Students need to feel secure enough to openly share their thoughts, feelings, and experiences without fear of judgment or repercussions (Azmi et al., 2024). Institutions play a critical role in creating this environment by actively encouraging open communication and empathy in interactions between students, educators, and clinical supervisors.

Providing access to counseling services or peer-support groups can be instrumental in helping students navigate the emotional demands of reflective practice (Rothwell et al., 2021). Counseling services can offer professional support and strategies for processing emotions, while peer-support groups create a sense of community, allowing students to share their experiences with others who understand their challenges. Both resources can provide validation and reassurance, helping students build resilience and emotional strength (Donohoe, 2022).

Incorporating resilience-building activities into the curriculum is another effective approach to addressing the emotional challenges associated with reflective practice. Resilience training can help students to develop coping mechanisms for dealing with stress, frustration, or guilt, enabling them to approach reflection with greater emotional stability. Activities such as mindfulness exercises, stress management workshops, and self-care practices can empower students to navigate the emotional complexities of their profession with confidence (Aziz et al., 2020).

Additionally, integrating guided reflection sessions into clinical education can help students to process their experiences in a structured and supportive setting. These sessions, facilitated by trained educators or supervisors, can provide students with the tools to explore their emotions constructively and turn challenging experiences into valuable learning opportunities (Horton-Deutsch & Sherwood, 2023). Group reflection activities can also encourage students to engage in collaborative discussions, fostering empathy and mutual support among peers.

Educators and supervisors can further support students by modeling reflective behaviours themselves and demonstrating how to approach emotional challenges constructively. When students witness their mentors engaging in reflective practice with openness and emotional resilience, they are more likely to adopt similar approaches in their own practice.

Addressing the emotional toll of reflective practice requires a holistic approach that includes institutional support, access to mental health resources, and resilience training. By creating an environment where students feel supported and empowered to confront emotional challenges, institutions can ensure that reflective practice becomes a valuable and sustainable part of professional development (Shin et al., 2023). This, in turn, prepares students to thrive in the emotionally demanding field of healthcare while maintaining their well-being.

Lack of Knowledge about Reflective Practice

A significant proportion of students (26.7%) demonstrate a lack of understanding of reflective practice, highlighting gaps in preclinical education. Without a clear grasp of its purpose, process, or benefits, students are unlikely to see reflection as a valuable tool for learning and professional growth. This deficiency may lead to missed opportunities for self-improvement, critical thinking, and deeper engagement with clinical experiences.

To address this, a structured module in reflective methodologies such as journaling, guided self-assessments, group discussions, and reflective essays should be integrated into the curriculum (Mgbekem et al., 2016; Nukpezah et al., 2021). These strategies do not only clarify the reflective process, but they also help students to develop the habit of introspection and continuous learning. By introducing these practices early in nursing education, students can cultivate reflective skills before entering clinical settings, making them more adept at analysing their experiences, identifying areas for growth, and improving patient care (Reljic et al., 2019).

Furthermore, clinical educators and supervisors play a crucial role in reinforcing the importance of reflection. By modeling reflective behaviours such as openly discussing their thought processes, decision-making rationales, and lessons learned from clinical encounters, they can demonstrate how reflection enhances professional practice (McCarthy et al., 2021). Encouraging students to engage in guided reflection during clinical training further reinforces its relevance, ultimately fostering a culture of lifelong learning and self-improvement in healthcare.

A comparative analysis of student experiences at Daeyang University and Mzuzu University reveals notable differences in the barriers they face during clinical training. One striking contrast is the extent to which emotional consequences are perceived as a challenge. A significantly higher proportion of Daeyang students (40.0%) identified emotional distress as a barrier compared to their counterparts at Mzuzu University (14.0%). This discrepancy may stem from variations in the clinical environment, differences in cultural attitudes toward emotional expression, or the availability and effectiveness of mental health support systems within each institution. A more emotionally demanding or high-pressure setting at Daeyang and clinical environment could contribute to this trend, whereas students at Mzuzu University may either experience fewer emotional burdens or be less inclined to report them.

Conversely, Mzuzu University students were more affected by an unsupportive clinical environment, with 64.0% highlighting it as a barrier compared to 41.2% of Daeyang University students. This suggests potential disparities in the quality of clinical placements, faculty engagement, or institutional resources available to support student learning. Limited access to mentorship, inadequate supervision, or a lack of constructive feedback in clinical settings could contribute to these perceptions at Mzuzu University. The differences in institutional support structures and the overall learning environment may significantly influence students' experiences, shaping their ability to navigate challenges and develop clinical competence (Barbagallo, 2020).

These findings underscore the need for targeted interventions to enhance student support at both universities. Strengthening emotional support mechanisms at Daeyang University and improving the clinical learning environment at Mzuzu University could help mitigate these barriers, fostering a more effective and equitable training experience for all students (Harerimana, 2018).

Similarly, qualitative findings identified several barriers to reflective practice, including time constraints, unsupportive clinical environments, inadequate knowledge, and the laborious nature of reflective writing. Time limitations were a recurring theme. Students struggled to balance reflection with other academic and clinical responsibilities. This barrier is widely reported in the literature, where the fast-paced clinical environment often limits opportunities for deep, structured reflection (Artioli et al., 2021; Barbagallo, 2020; Gilheaney & Quigley, 2021). Strategies to mitigate this include promoting brief, on-the-spot reflection and embedding reflection into routine activities to make it more feasible (Donohoe et al., 2022).

The laborious nature of reflective writing was also a deterrent for some students. While structured writing promotes critical thinking and documentation, flexibility in the format of reflection such as oral reflections, group debriefings, or digital journaling could increase student engagement without compromising the benefits of the process Adams, 2018). The study by Karimi et al., (2017) explored the perceptions of students regarding the reflective process, with a particular focus on its challenges and requirements for effective engagement. The findings revealed that students generally found reflection to be a demanding and labour-intensive process that does not come naturally. Instead, it necessitates deliberate effort, appropriate guidance, and a supportive environment. Key factors identified as essential for

successful reflection included the creation of safe and non-judgmental spaces where students felt confident and encouraged to express themselves freely.

The study highlighted the importance of fostering a supportive atmosphere that promotes trust and collaboration, enabling students to critically analyse their experiences and grow both personally and professionally. Overall, Karimi et al., (2017) emphasised that while reflection is a valuable educational tool, its implementation requires intentional facilitation and an environment conducive to open and constructive engagements.

Addressing these barriers involves implementing strategies like structured reflective sessions, integrating reflection into routine curricula, and fostering emotionally safe environments for learners to process experiences. These approaches align with current recommendations for making reflection a cornerstone of clinical education while addressing systemic challenges (Parwanda, 2022).

The studies by Artioli et al., (2021) and Barbagallo, (2020) do not offer valuable insights into the barriers to reflective practice, but they also reveal significant limitations in geographical and cultural diversity. To address these barriers effectively, education systems must focus on creating supportive environments, allocating time and resources, and making reflection meaningful and accessible. Moreover, expanding research to include perspectives from underrepresented regions is essential to developing globally inclusive strategies that empower students across diverse cultural and educational contexts to engage in reflective practice confidently and effectively.

5.5 Reflective Practice Support

Reflective practice is a fundamental component of professional development in nursing, enabling students and practitioners to critically analyse their experiences, enhance clinical decision-making, and improve patient care (Adams, 2018; Mgbekem et al., 2016). It allows individuals to assess their strengths, identify areas for improvement, and apply lessons learned to future clinical situations, ultimately fostering a culture of continuous learning and professional growth. By engaging in reflective practice, nurses do not only enhance their own competencies, but they also contribute to the overall quality of healthcare delivery by refining their ability to make informed, patient-centered decisions (Noora Ahmed et al., 2024).

In the clinical environment, support from qualified and practicing nurses plays a crucial role in fostering effective reflection among students. This support can take various forms, including structured reflective discussions, constructive feedback on clinical experiences, and mentorship in identifying key learning moments Boyd, 2022; Pretorius & Ford, 2016). Guided reflections, whether through one-on-one debriefing sessions, group discussions, or written reflective journals, provide students with opportunities to process complex clinical situations, articulate their thoughts, and gain deeper insights into their practice. Additionally, experienced nurses can model reflective behaviours, demonstrating how critical thinking and self-assessment contribute to professional development and better patient outcomes (Mcloughen et al., 2020).

When nurses actively engage in and promote reflective practices, they help create an environment that encourages continuous learning, self-improvement, and the integration of theoretical knowledge into real-world patient care (Zarrin et al., 2023). This integration is particularly significant as nursing students transition from academic settings to hands-on clinical practice, where they must apply evidence-based knowledge while adapting to dynamic patient needs. The presence of supportive mentors and role models can ease this transition, reinforcing the importance of self-evaluation and adaptability in professional practice.

However, the extent and quality of this support can vary across institutions and clinical settings, impacting students' ability to develop strong reflective habits. Differences in workload, institutional priorities, and available resources may influence the level of guidance provided to nursing students, with some receiving structured and well-supported reflective opportunities, while others struggle to find the necessary mentorship (Rothwell et al., 2021). Furthermore, time constraints and high patient care demands can make it challenging for practicing nurses to consistently engage in reflective discussions with students, potentially limiting the effectiveness of reflective practice in certain environments (Zhang et al., 2022).

Strengthening reflective practice support in the clinical area is crucial for shaping competent, self-aware, and adaptive healthcare professionals (Karimi et al., 2017). By implementing strategies such as formalised mentorship programs, integrating reflection into routine clinical debriefings, and providing nurses with training on effective reflective facilitation, institutions can enhance the reflective capabilities of nursing students (Marshall et al., 2022). In doing so, they contribute to the development of a workforce that is not only skilled in technical aspects of patient care but also adept at self-assessment, critical thinking, and lifelong learning,

essential qualities for providing safe, high-quality healthcare in an ever-evolving medical landscape.

The study's findings underscore the essential role that clinical support from qualified and experienced nurses plays in facilitating reflective practice among final-year undergraduate nursing and midwifery students. Effective guidance from these professionals enables students to critically analyze their clinical experiences, refine their decision-making skills, and integrate theoretical knowledge with hands-on patient care (Graham & O'Brien, 2020). This support is instrumental in fostering a learning environment where reflective thinking becomes a habitual and valued practice, ultimately contributing to the development of competent, self-aware, and adaptive healthcare professionals.

However, the results also highlight significant gaps and challenges in multiple key areas, particularly in terms of knowledge, motivation, and the overall clinical learning environment. A lack of sufficient understanding and training in reflective practice among both students and clinical mentors can limit the depth and effectiveness of reflective engagement (Balabanova et al., 2021). Additionally, motivation plays a crucial role—students who do not perceive the value of reflection or who lack encouragement from mentors may struggle to develop strong reflective habits. Furthermore, inconsistencies and deficiencies in the structure and support of clinical learning environments can create barriers to meaningful reflection, with some clinical settings offering limited opportunities for guided discussions, feedback, or mentorship Azmi et al., 2024).

These findings align with existing literature on the complexities of fostering reflective practices in clinical settings (Donohoe et al., 2022; Gaeeni et al., 2021; Momennasab et al., 2021). Prior research similarly indicates that while reflective practice is widely recognised as a vital component of professional development, its implementation is often hindered by structural limitations, varying levels of support from clinical educators, and the high-pressure nature of healthcare environments (Gaeeni et al., 2021). Addressing these challenges requires targeted interventions, such as structured mentorship programmes, enhanced training in reflective techniques for both students and mentors, and institutional efforts to cultivate a culture of reflection within clinical settings (Donohoe et al., 2022). Strengthening these areas can help bridge the existing gaps and ensure that undergraduate nursing and midwifery students receive the necessary support to develop and sustain effective reflective practices throughout their careers.

The comparative analysis of support for reflective practices between Daeyang University and Mzuzu University highlights significant disparities that warrant further investigation and targeted intervention. Reflective practice is a fundamental aspect of nursing education, playing a crucial role in the development of critical thinking, self-awareness, and continuous professional growth (Mahon & O'Neill, 2020). It enables nursing students to critically analyse their clinical experiences, learn from challenges, and refine their decision-making skills—ultimately contributing to improved patient care and professional competency (Ekelin, 2021).

The study's findings reveal a notable difference in the level of support provided for reflective practices between the two institutions. Specifically, 78.6% of students at Daeyang University reported receiving support from qualified nurses in engaging with reflective practice, whereas only 46.0% of students at Mzuzu University indicated receiving similar support. This substantial discrepancy suggests considerable variability in institutional cultures, clinical training environments, and the degree of emphasis placed on reflective practice as a pedagogical tool within clinical settings.

Several factors may contribute to these disparities. Curricular frameworks likely play a significant role in shaping the extent to which reflective practice is integrated into clinical training (Karnielli-Miller, 2020). Daeyang University may have more structured mentorship programmes, dedicated reflective practice sessions, or greater institutional investment in fostering a culture of reflection among both students and practicing nurses. In contrast, Mzuzu University's lower reported level of support could stem from challenges such as limited resources, high clinical workload pressures on supervising nurses, or a lack of formalized structures for reflective engagement within the clinical learning environment.

Additionally, the varying attitudes and preparedness of clinical mentors at each institution may influence students' experiences with reflective practice. If practicing nurses at Daeyang University are more actively involved in guiding students through reflective discussions, providing constructive feedback, and encouraging self-assessment, it could explain the higher reported support levels. Conversely, if Mzuzu University lacks systematic training for clinical mentors on how to facilitate reflective practice effectively, students may receive less guidance, leading to lower engagement in meaningful reflection.

The findings align with broader research on the challenges of embedding reflective practice in clinical education, where institutional commitment, faculty engagement, and structured

mentorship programs are key determinants of successful implementation (Balabanova et al., 2021; Kinsella et al., 2022; Weller-Newton &Drummond-Young, 2023). Addressing these disparities requires strategic interventions to strengthen the support systems for reflective practice, particularly at Mzuzu University. Efforts may include developing formalized mentorship frameworks, training clinical educators on best practices for fostering reflective engagement, and integrating structured reflection sessions into clinical rotations.

By ensuring that all nursing students regardless of their institution receive adequate support in developing reflective habits, nursing education programmes can contribute to the cultivation of more competent, self-aware, and adaptable healthcare professionals (Martin et al., 2022). Strengthening reflective practice support across institutions will not only enhance individual learning experiences, but it will also improve overall patient care outcomes by equipping future nurses with the critical thinking and self-evaluation skills necessary for high-quality clinical practice (Gaeeni et al., 2021).

The majority of students from both universities acknowledged the importance of support from qualified nurses in reflective practice, with 90.2% from Daeyang and 98.0% from Mzuzu affirming its necessity. This consensus underscores a universal recognition among nursing students of the value that guided reflection brings to their educational experience. This aligns with existing literature that identifies reflection as critical for bridging the gap between theory and practice, improving critical thinking, and fostering professional growth in clinical settings (Alsalamah et al., 2022; Bouchlaghem & Mansouri, 2018). However, despite this acknowledgment, only 49.0% of Daeyang students and 30.0% of Mzuzu students felt that qualified nurses were interested in supporting them with reflection. This gap between the perceived importance of reflective support and the actual support received highlights a critical area for improvement.

The literature emphasises that effective facilitation of reflective practice is associated with numerous benefits, including increased job satisfaction, improved patient care, and enhanced professional development (Adam et al., 2021; Peixoto & Peixoto, 2016). High-quality reflective practice groups have been linked to greater personal and job resources, such as self-efficacy and social support, which in turn positively influence nurses' professional quality of life (Shin et al.,2023). This aligns with this study’s findings from both universities, where a majority of students expressed the need for support and guidance from qualified nurses to help identify issues for reflection (70.6% at Daeyang and 78.0% at Mzuzu).

Addressing these disparities requires targeted interventions to strengthen the support systems for reflective practice, particularly at Mzuzu University. Efforts may include developing formalised mentorship frameworks, training clinical educators on best practices for fostering reflective engagement, and integrating structured reflection sessions into clinical rotations (Parwanda, 2022). By ensuring that all nursing students regardless of their institution receive adequate support in developing reflective habits, nursing education programmes can contribute to the cultivation of more competent, self-aware, and adaptable healthcare professionals (Donohoe et al., 2022). Strengthening reflective practice support across institutions will not only enhance individual learning experiences, but it will also improve overall patient care outcomes by equipping future nurses with the critical thinking and self-evaluation skills necessary for high-quality clinical practice (Barbagallo, 2020).

Consistency in the guidance provided by qualified nurses is indeed a cornerstone for fostering effective reflective practices among nursing students. Approximately 74% of students from both institutions emphasised the importance of consistent guidance, underscoring its role in minimising confusion and promoting clarity in reflective practice sessions (Aziz et al., 2020). Inconsistent advice, on the other hand, has been shown to create uncertainty, which can impede the development of meaningful reflective practices. Recent literature highlights that structured and systematic reflection is essential for cultivating critical thinking and professional growth in nursing education (Noora Ahmed et al., 2024; Shin et al., 2023).

The lack of organised reflection within nursing practice has been identified as a significant barrier to effective reflective practice. This gap points to the urgent need for experienced practitioners to provide structured and consistent guidance. Studies suggest that when reflective practices are well-structured, they do not only enhance students' learning experiences, but they also contribute to their ability to integrate theoretical knowledge with practical application (Noora Ahmed et al., 2024; Alsalamah et al., 2022).

Interestingly, while a higher percentage of Daeyang students reported receiving support for reflective practice, only 56.9% expressed satisfaction with this support, compared to 34.0% at Mzuzu. This discrepancy highlights a critical insight: the quantity of support does not necessarily translate into quality. Factors such as the depth of engagement, the relevance of feedback, and the relational dynamics between students and nurses are pivotal in shaping students' satisfaction levels (Rothwell et al., 2021). Recent findings suggest that effective mentorship in reflective practice requires not just technical expertise, but also emotional

intelligence and the ability to foster a supportive and collaborative environment (Adam et al., 201; Azmi et al., 2024; Bulman et al., 2020).

Moreover, the literature emphasises the importance of addressing unconscious biases and self-awareness in reflective practice (Aziz et al., 2020). These elements are crucial for ensuring that guidance provided by nurses is not only consistent, but also tailored to meet the diverse needs of students. By integrating these considerations into training programmes, healthcare institutions can enhance the overall quality of reflective practice facilitation, ultimately benefiting both students and the broader healthcare system (Azmi et al., 2024).

When evaluating the preparedness of qualified nurses to effectively facilitate reflective practice, a noticeable difference in perception emerges between students from Daeyang University and Mzuzu University. Among Daeyang University students, 45.1% believe that nurses possess the essential knowledge and skills needed for this role, compared to 30.0% of Mzuzu University students who share this perspective. This variance in student perception raises critical questions about the consistency of nurse training and its alignment with the expectations of reflective practice facilitation.

Such perceptions are not inconsequential, as they may significantly influence the quality and effectiveness of reflective practice sessions. The belief that nurses are well-prepared is likely to foster a more open and engaging environment, thereby enhancing the overall learning experience for students (Richard et al., 2019). On the other hand, doubts regarding nurses' preparedness could hinder the collaborative and introspective nature of reflective practices, potentially impeding both personal and professional growth among students.

Research supports the importance of reflective capabilities in nursing practice. Karnieli-Miller (2020) emphasises that nurses who engage in higher levels of reflection tend to exhibit greater self-efficacy, work engagement, and professional resilience. These attributes are not only vital for delivering quality care, but also for fulfilling roles as effective educators and mentors. Thus, the ability of nurses to reflect deeply on their practice is directly linked to their competence in guiding and supporting students during reflective sessions O’Brien & Graham, 2020).

Given this, it becomes imperative to enhance nurses' reflective capabilities through targeted training and professional development. By doing so, healthcare institutions can cultivate a workforce that is not only adept at reflective practice but also better equipped to mentor the

next generation of nurses (O'Brien & Graham, 2020). This improvement could create a ripple effect, leading to more confident, engaged, and competent nursing professionals, which, in turn, strengthens the overall healthcare system.

The quantitative data highlights significant differences between Daeyang University and Mzuzu University in terms of support for reflective practices. While students universally recognize the importance of such support, there is a clear need to bridge the gap between this recognition and the actual support provided. Investing in training qualified nurses to effectively facilitate reflective practice, ensuring consistency in guidance, and fostering an institutional culture that values and supports reflection are essential steps toward enhancing nursing education and, ultimately, patient care outcomes (Saab et al., 2020).

Qualitatively, this study also explored the clinical support that qualified nurses provide to undergraduate nursing and midwifery students, revealing key challenges and gaps in knowledge, motivation, and the clinical learning environment. The three identified sub-themes; knowledge and understanding of reflective practice, motivation and willingness to support students, and the clinical learning environment, highlight critical areas that influence students' ability to engage in effective reflection during clinical training.

The findings highlight a significant knowledge gap among qualified nurses, particularly concerning the application of structured reflective models such as Gibbs' Reflective Cycle. This gap presents a major challenge to students' ability to engage in reflective practice effectively, as they often rely on clinical supervisors to facilitate and guide their reflective learning. Without adequate support from supervisors, students may struggle to develop the critical thinking and self-awareness necessary for continuous professional development and improved patient care (Kinsella et al., 2022). This aligns with previous research indicating that while reflective practice is widely recognised as a valuable tool in nursing education, its implementation is often inconsistent due to insufficient training among practitioners (Mahon & O'Neill, 2020; Smith, 2021). Reflective models, such as Gibbs' Cycle, provide a systematic approach to analysing experiences, but their underutilisation among clinical mentors hinders students' ability to develop structured reflection skills (Bulman et al., 2020). Without proper orientation, nurses may struggle to guide students effectively, leaving them to seek alternative sources of support, such as peers, or engage in reflection in an unsupervised manner.

Research underscores the impact of this knowledge gap, demonstrating that a lack of formal training and understanding of reflective methodologies among clinical staff can hinder the effective integration of reflective practice into clinical education. Studies suggest that nurses who lack familiarity with reflective models may be less equipped to mentor students in reflective thinking, thereby limiting students' opportunities to engage in meaningful self-evaluation and experiential learning (Alsamah et al., 2022; Gaeeni et al., 2021; Gilheaney & Quigley, 2021). This deficiency does not only affect student development, but it also has implications for the overall quality of patient care, as reflection is a key component in clinical decision-making and professional growth.

To address this gap, targeted professional development initiatives for clinical staff should be implemented, with a strong of workshops, in-service training, and continuous professional education programmes in enhancing the ability of nurses to engage in and facilitate structured reflection (Reljic et al., 2019). These training programmes can provide clinical staff with practical strategies to incorporate reflection into daily practice, fostering an environment where reflective learning is actively encouraged and supported.

Furthermore, the integration of digital learning tools and online reflective practice modules can complement traditional training methods, allowing nurses to develop their reflective skills in a flexible and self-paced manner. Studies have shown that interactive online platforms and e-learning courses can significantly improve emphasis on the principles and models of reflective practice (Momennasab et al., 2021). Research supports the effectiveness nurses' confidence and competence in guiding students through reflective processes. Additionally, embedding structured reflection within clinical mentorship programmes can reinforce its application in real-world settings, ensuring that both experienced nurses and students benefit from a culture of continuous learning.

By equipping clinical staff with comprehensive knowledge and practical skills in reflective practice, healthcare institutions can create a supportive learning environment that enhances both student development and patient care outcomes (Momennasab et al., 2021). Encouraging a structured approach to reflection within clinical settings will not only improve the competency of future healthcare professionals but also contribute to a more thoughtful, analytical, and patient-centered approach to nursing practice.

Similar to quantitative data, the qualitative data present a dichotomy in nurse motivation: some nurses actively encourage reflection by prompting students to evaluate their clinical performance, while others disengage, citing lack of responsibility or work overload. This divergence mirrors findings in existing studies, which indicate that individual attitudes, institutional culture, and workload significantly influence the degree of support students receive in clinical settings (McLoughen et al., 2020; Panda et al., 2021; Soroush et al., 2021). The variability in engagement suggests that fostering a standardised approach to reflective practice may require addressing both personal and systemic barriers.

Enhancing motivation fostering culture of mentorship within clinical settings is essential. Mentorship programmes have been shown to increase staff willingness to engage in teaching and reflective practices by promoting a sense of shared responsibility and professional development (Mhango, 2021). Additionally, recognising and rewarding clinical staff for their mentorship contributions through incentives, professional recognition, or career advancement opportunities could enhance their motivation to support students effectively Soroush et al., 2021). Structured mentorship frameworks, such as formal pairing of experienced nurses with students or junior staff, could further strengthen reflective learning and ensure consistency in guidance across different clinical environments.

Additionally, an unsupportive clinical learning environment, characterised by poor relationships, excessive workloads, and resource constraints, emerged as a significant barrier to reflective practice. These challenges resonate with findings from studies on the clinical learning environment's impact on nursing education, where high workloads and inadequate staffing often result in students being viewed as supplementary staff rather than learners. A lack of structured support systems further exacerbates the difficulty of integrating reflection into daily practice Karimi et al., 2017; McLoughen et al., 2020).

Students in this study reported that excessive workload often leaves little time for qualified nurses to engage in reflective teaching. This challenge aligns with the broader issue of understaffing and resource scarcity in many healthcare systems (Bradley eta al., 2015; Mhango et al., 2021). Research indicates that employing dedicated clinical instructors or nurse educators in practice settings can alleviate this burden, ensuring that students receive the guidance needed for reflective practice (Adams et al., 2021; Gordon, 2019). Additionally, integrating reflective practice into routine debriefing sessions and interdisciplinary case discussions can provide

structured opportunities for reflection without adding excessive workload demands on staff (Richard et al., 2019).

Innovative solutions such as implementing technology-assisted reflective tools, may also help streamline reflection in busy clinical environments. Digital platforms that facilitate structured reflection through guided questions and case-based learning have been found to enhance engagement and critical thinking among students (Bouchlaghem & Mansouri, 2018). Institutions should consider leveraging such tools alongside traditional mentorship and training programmes to create a comprehensive and sustainable approach to reflective practice within clinical education.

The findings of this study highlight significant challenges in the support undergraduate nursing and midwifery students receive for reflective practice. While some nurses demonstrate motivation and willingness to assist students, the general lack of knowledge about reflective models, inconsistent engagement, and an unsupportive clinical learning environment limit students' ability to engage in meaningful reflection. Addressing these challenges requires a multifaceted approach, including professional development programmes for nurses, integration of reflection into routine clinical discussions, and structured mentorship initiatives (Donohoe et al, 2022). By strengthening reflective practice support in clinical settings, institutions can enhance the development of self-aware, competent, and adaptive healthcare professionals.

5.6 Conclusion

This paper has discussed the findings of the study on the experiences of final-year undergraduate nursing and midwifery students regarding reflective practice. It has highlighted the varying levels of understanding and engagement with reflective practice among students as well as the factors that enable or hinder their reflective activities. The implications of these findings for nursing and midwifery education have been explored. Ultimately, the study has explored how better the students can be supported by clinical mentors. Fostering reflective practitioners is essential for the ongoing development of the nursing and midwifery professions and for improving the quality of patient care.

5.7 Limitations

The study was conducted in two nursing and midwifery training institutions located in Central and Northern Malawi. While this provided valuable insights, it may not be representative of the experiences of all final year undergraduate nursing and midwifery students across Malawi. Consequently, the findings may have limited generalisability. This limitation suggests the need for future research involving a larger, more diverse sample that encompasses all three regions of Malawi and broader applicability of the results.

Another limitation pertains to the timing of data collection, which was carried out over a specific period. This snapshot in time may not fully account for variations in reflective practice that could occur across different semesters or clinical placements. Longitudinal studies following students throughout their entire education programme could provide deeper insights into the development and evolution of reflective practices over time.

In addition, recall bias could also be a limitation. This occurs when participants unconsciously skew their responses leading to distorted or incomplete data.

5.8 Recommendations

5.8.1 Recommendations for Practice

Providing comprehensive reflective practice training for qualified nurses is essential to bridge knowledge gaps and standardise reflective practices. NMCM to make sure that training programs incorporate widely recognised theoretical models such as Gibbs' Reflective Cycle and Schön's Reflection-in-Action, to offer a structured approach to reflection. These models can help nurses critically analyse their experiences and improve their clinical decision-making skills. This will ensure standardised support to students regarding reflective practice.

A supportive clinical environment is a cornerstone for fostering effective reflective practice. Encouraging collaboration among healthcare teams can create a culture of learning and mentorship, where reflection is integrated into daily routines. Interdisciplinary case discussions and debriefing sessions can provide structured opportunities for reflection, promoting shared learning and professional growth (Artioli et al., 2021).

Addressing resource constraints such as staffing shortages and limited access to training materials, is also essential. Institutions should advocate for increased funding and support to

create an environment conducive to reflective practice. Institutional support is vital for addressing systemic barriers to reflective practice. Improving nurse-to-patient ratios can alleviate workload pressures, thereby enabling nurses to dedicate more time to student engagement and mentorship. Integrating dedicated mentorship roles, such as clinical nurse educators or reflective practice facilitators, can further support this goal by ensuring that students receive consistent and high-quality guidance.

5.8.2 Recommendations for Nursing Education

Embedding reflective practice into pre-registration nursing curricula and integrating reflective practice early in their education helps them to develop essential skills to analyse their actions, decisions, and experiences. This fosters a habit of introspection, enabling them to identify areas for improvement, celebrate successes, and learn from mistakes. It also cultivates emotional intelligence and resilience, qualities that are crucial for navigating the complex and often demanding healthcare environment.

Nurses and Midwives Council to make sure that nursing education institutions adopt a consistent approach to teaching reflective practice. For example, making sure that all nursing education institutions incorporate structured lessons on reflective frameworks such as Gibbs' Reflective Cycle or Kolb's Experiential Learning Model across all years of study. This will ensure that there is foundational knowledge about reflection which is built over the years.

Employing clinical instructors or increasing lecturer involvement in practice settings can provide students with the support they need, particularly in resource-limited environments. Evidence suggests that dedicated educational roles in clinical settings enhance students' learning experiences (Rothwell et al., 2021).

Nurses and Midwives Council to facilitate the development of structured mentorship programmes with clearly defined expectations for reflective support which are essential for maintaining consistency across institutions. These programmes should include formal pairing systems that match experienced nurses with students or junior staff, as well as mentorship competency training to equip mentors with the necessary skills (Soroush et al., 2021).

Regular evaluations of mentorship programmes are critical for identifying areas for improvement and ensuring their effectiveness. Institutions should implement robust feedback

mechanisms that allow students to share their experiences and provide constructive input. This feedback can be used to refine mentorship strategies and address any gaps in support.

Fostering a culture where reflective practice is valued and rewarded is equally important. Recognising and celebrating the contributions of mentors through awards, promotions, or other incentives can motivate staff to actively engage in reflective teaching and mentorship.

5.8.3 Recommendations for further studies

In addition to the areas already addressed within the discussion, the following topics are proposed for further exploration:

1. Nurse Educators' Experiences of Reflective Practice in Malawi.

This research area aims to delve deeper into the experiences and perspectives of nurse educators regarding reflective practice in their professional roles. The study could explore how reflective practice is understood, implemented, and its impact on teaching methods, professional growth, and the quality of nursing education in Malawi. Moreover, it would examine the challenges faced and the support systems available to nurse educators in fostering reflective practice. The study findings rely heavily on students' perspectives, without additional verification from other stakeholders like educators or clinical supervisors. This could limit the depth and breadth of insights into reflective practices.

2. Clinical Mentors' Experiences of Reflective Practice in Malawi.

This area focuses on understanding the role of reflective practice from the perspective of clinical mentors working in the healthcare system in Malawi. The research could investigate how mentors utilise reflective practice to enhance their mentoring techniques, address complex clinical situations, and contribute to the professional development of nursing students. Additionally, the study could consider the specific challenges clinical mentors face and potential strategies to support reflective practices in clinical settings.

3. A Comparative Analysis of Reflective Practices Between 1st/2nd Year and 3rd/4th Year Nursing Students.

This proposed research aims to compare the reflective practices of nursing students at different stages of their academic journey. By analysing the approaches, depth, and frequency of

reflective practices among 1st and 2nd-year students compared to their senior counterparts in the 3rd and 4th years, the study could identify developmental trends and key differences. It could also explore how educational interventions and practical experiences contribute to the growth of reflective skills over time.

These areas represent critical opportunities to deepen understanding, improve practices, and enhance the overall quality of nursing education and clinical mentorship in Malawi.

5.9 Dissemination

A copy of this thesis will be made available in both universities' libraries and library repository to be accessible to all staff and students. Findings will also be published in a peer reviewed journal to contribute to the available literature on the subject matter. The study will be submitted for consideration to present at a conference.

REFERENCES

Adams, A. B., Druye, A. A., Kumi-Kyereme, A., Osman, W. & Alhassan, A. (2021). Nursing And midwifery students' satisfaction with their clinical rotation experience: the role of the clinical learning environment. *Nursing Research and Practice*, 2021(1),7258485.

Adams, G. (2018). *The use of reflection in practice. The experiences of 3rd Year Baccalaureus Technologiae (BTECH) nursing students at a nursing education institution in the Western Cape Province* (Stellenbosch University-Thesis).

Agyeman-Yeboah, J., Korsah, K. A., & Okrah, J. (2017). Factors that influence the clinical utilization of the nursing process at a hospital in Accra, Ghana. *BMC Nursing*, 16(1), 1–7.

Al-Kofahy, L. & James, L. (2017). Clinical reflection: The experience of nursing students in the obstetric unit. *International Journal of Nursing & Clinical Practices.* https://doi.org/10.15344/2394-4978/2017/243.

Alsalamah, Y., Albagawi, B., Babkair, L., Alsalamah, F., Itani, M. S., Tassi, A., & Fawaz, M. (2022). Perspectives of nursing students on promoting reflection in the clinical setting: a qualitative study. *Nursing Reports*, *12*(3), 545-555.

Artioli G, Deiana L, De Vincenzo F, Raucci, M., Ammaducci, G., Bassi, M. C., Leo, S., Hayter, M. & Ghirotto, L. (2021). Health professionals and students' experiences of reflective writing in learning: A qualitative meta-synthesis. *BMC Medical Education.* https://doi.org/10.1186/s12909-021-02831-4

Austin, D., Gilkison, A., & Clemons, J. (2020). Turning reflection into learning: a practice development tool for midwifery students. *Reflective Practice*, *21*(3), 301-315.

Aziz, A., Mahboob, U., & Saleem, T. (2020). Benefits of reflective writing in health care through the vivid lens of house officers. *MedEdPublish*, *9*, 60.

Azmi, B., Atan, A., Ali, M., Azizah, N., Lee, S. P., & Zolkefli, Y. (2024). Exploring reflective practice in clinical nursing education among nurse educators. *Malaysian Journal of Medicine & Health Sciences*, *20*(3).

Balabanova, A., Petrova, N., & Ivanova, I. (2021). Reflective practice in nursing education: A systematic review. *Journal of Nursing Education and Practice*, *11*(5), 35–44.

Barbagallo, M. S. (2020). Nursing students' perceptions and experiences of reflective practice: A qualitative meta-synthesis. *Teaching and Learning in Nursing*. https://doi.org/10.1016/j.teln.2020.07.006

Bass, J., Sidebotham, M., Creedy, D., & Sweet, L. (2020). Midwifery students' experiences and expectations of using a model of holistic reflection. *Women and Birth*, *33*(4), 383-392.

Beiranvand, S., Kermanshahi, S. K., & Memarian, R. (2021). Nursing instructors' clinical education competencies: an integrated review. *J Pak Med Assoc*, *71*(5), 1-11.

Bijani, M., Mohammadi, F., Haghani, F., Yamani, N & Karimi, S. (2021). Development and psychometric evaluation of a reflection on clinical practice questionnaire for nursing students. *BMC Nursing,20:185* https://doi.org/10.1186/s12912-021-00705-0.

Bouchlaghem, M. A. and Mansouri, H. (2018) 'Exploration of the gap between theory and practice in Tunisia nurse education system: A cross-sectional descriptive study with a focus on hand hygiene', *International Journal of Nursing*, 5(1), pp. 10–24. Doi: 10.15640/ijn. v5n1a3.

Boyd, C. (2023). *Reflective Practice for Nurses*. John Wiley & Sons.

Bradley, S. Kamwendo, F. Chipeta, E. Chimwaza, W. de Pinho, H. McAuliffe, E. (2015). Too few staff, too many patients: A qualitative study of the impact on obstetric care providers and on quality of care in Malawi. *BMC Pregnancy Childbirth.p15:65.*

Bulman, C., Lathlean, J., & Gobbi, M. (2020). The concept of reflection in nursing: Qualitative findings from an international study. *Nurse Education Today*, *94*, 104536.

Burns, N. & Grove, S. K. (2012). *Understanding Nursing Research. Building evidence based practice.* 5th Edition. Elsevier: Saunders Publishers.

Bvumbwe, T. Malema, A. Chipeta, M. (2015). Registered nurses' experiences with clinical teaching environment in Malawi. *Open J Nurs. 2015; 5(10):927.*

Bvumbwe, T & Mtshali, N. G. (2018). Transforming nursing education to strengthen health system in Malawi: An exploratory study. *The Open Nursing Journal, 12 (1), 93-105.* https//doi.org/10.2174/1874434601812010093.

Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The psychologist*, *26*(2).

Contreras, J. A., Edwards-Maddox, S., Hall, A. & Lee, M. A. (2020). Effects of reflective practice on Baccalaureate nursing students' stress, anxiety and competency: An

integrative review. *Worldviews on Evidence-Based Nursing, 17(3) 239-245.* https://doi.org/10.1111/wvn12438.

Cresswell, J. W. & Plano Clark, V. L. (2018). *Designing and Conducting Mixed Methods Research.* 3rd Edition. Sage Publications: London.

Dewey, J. (1933) *How We Think. A Restatement of the Relation of Reflective Thinking to the Educative Process*. DC Heath, Massachusetts.

Donohoe, A., Guerandel, A., O'Neill, G. M., Malone, K., & Campion, D. M. (2022). Reflective writing in undergraduate medical education: A qualitative review from the field of Psychiatry. *Cogent Education*, *9*(1), 2107293.

Dos Santos Martins Peixoto, N. M., & Dos Santos Martins Peixoto, T. A. (2016). Reflective practice among nursing students in clinical teaching. *Revista De Entermagem Referenica*, 4(11), 121–131. https://doi.org/10.12707/RIV16030

Ekelin, M., Kvist, L. J., Thies-Lagergren, L., & Persson, E. K. (2021). Clinical supervisors' experiences of midwifery students' reflective writing: a process for mutual professional growth. *Reflective Practice*, *22*(1), 101-114.

Gaeeni, M., Rezaei, M., Khoramirad, A., & Parizad, A. (2021). The challenges of clinical education in nursing: a qualitative analysis of nursing students and clinical instructors' perspectives. *J nurs midwifery sci*, *8*(4), 260.

Galutira, G. D. (2018). Theory of reflective practice in nursing. *International Journal of Nursing Science 8(3): 51-56.* DOI: 10.5923/j.nursing.20180803.02

Gibbs, G. (1988). *Learning by doing: A guide to teaching and learning methods*. Further Education Unit, Oxford Polytechnic.

Gilheaney, O., & Quigley, D. (2021). The enablers and barriers to facilitating the development of reflective practice skills of third level allied health professional students through

technology: A scoping review. *Advances in Communication and Swallowing*, *24*(2), 125-145.

Gordon, S. P. (2019). "Educational Supervision: Reflections on Its Past, Present, and Future." *Journal of Educational Supervision*, 2(2), Article 2.

Graham, M. M., & O'Brien, B. (2020). Guided group reflection: A question of organisation and support for baccalaureate nursing students: Part1. *Nurse Education in Practice*, *44*, 102754.

Grove, S.K., Burns, N. & Gray, J.R. (2013). *The Practice of Nursing Research. Appraisal, Synthesis and Generating Evidence.* 7th Edition. St. Louis: Elsevier Saunders Publishers.

Harerimana, B. (2018). Reflective practice for professional development among nursing instructors. *Teaching Innovation Projects, Volume 8(1) 2018*. https://doi.org/10.5206/tips.v8i1.6216.

Horton-Deutsch, S., & Sherwood, G. (2023). *Reflective practice: Reimagining ourselves, reimagining nursing*. Sigma Theta Tau.

Ingham-Broomfield, B. (2021). A nurses' guide to using models of reflection. *The Australian Journal of Advanced Nursing*, *38*(4), 62-67.

Kamphinda, S. & Chilemba, E.B. (2019). 'Clinical supervision and support: Perspectives of undergraduate nursing students on their clinical learning environment in Malawi', *Curationis* 42(1), a1812. https://doi.org/10.4102/curationis.v42i1.1812

Kaphagawani, N. C. C. (2015). *Nursing Students Clinical Learning Experiences in Selected Colleges in Malawi. A Model to Facilitate Clinical Learning*. Thesis. North-West University.

Karimi, S., Haghani, F., Yamani, N. & Kalyani, M. N. (2017). A qualitative inquiry into nursing students' experience of facilitating reflection in clinical setting. *Scientific World Journal*. https://doi.org/10.1155/2017/6293878.

Karnieli-Miller, O. (2020). Reflective practice in the teaching of communication skills. *Patient Education and Counselling, 103*(10), 2166-2172.

Khoiriyati, A., & Sari, N. K. (2022). Reflective practice on nursing students: A qualitative study. *Indonesian Nursing Journal of Education and Clinic (Injec)*, *6*(2), 201-209.

Kinsella, E. A., Bossers, A., & Ferrazzi, P. (2022). Enabling reflective practice in clinical education: Challenges and strategies. *Health Professions Education*, *8*(2), 150–160.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development.* Prentice-Hall.

Machi, L. A. & McEvoy, B. T. (2016). *The Literature Review: Six Steps to Success*. 3rd Edition. Corwin.

Mahlanze, H. T., & Sibiya, M. N. (2017). Perceptions of student nurses on the writing of reflective journals as a means for personal, professional and clinical learning development. *Health SA Gesondheid, 22, 79–86.*

Mahon, P., & O'Neill, M. (2020). Through the looking glass: the rabbit hole of reflective practice. *British Journal of Nursing*, *29*(13), 777-783.

Marshall, T., Keville, S., Cain, A., & Adler, J. R. (2022). Facilitating reflection: a review and synthesis of the factors enabling effective facilitation of reflective practice. *Reflective Practice*, *23*(4), 483-496.

Matshaka, L. (2021). Self-Reflection: A tool to enhance student nurses' authenticity in

caring in a clinical setting in South Africa. *International Journal of Africa Nursing Sciences.* https://doi.org/10.1016/j.ijans.2021.100324.

Mbakaya, B.C., Kalembo, F. W., Zgambo, M. Konyani, A., Lungu, F., Tveit, B., Kaasen, A., Simango, M. & Bvumbwe, T. (2020) Nursing and midwifery students' experiences and perception of their clinical learning environment in Malawi: A mixed- method study. *BMC Nursing.*

McCarthy, B., Bessell, N., Murphy, S., & Hartigan, I. (2021). Nursing and speech and language students' perspectives of reflection as a clinical learning strategy in undergraduate healthcare education: A qualitative study. *Nurse Education in Practice*, *57*, 103251.

McLeod, G. A., Vaughan, B., Carey, I., Shannon, T., & Winn, E. (2020). Pre-professional reflective practice: Strategies, perspectives and experiences. *International Journal of Osteopathic Medicine*, *35*, 50-56.

Mcloughen, A., Levy, D., Johnson, A., Nyunyen, H., & McKenzie, H. (2020). Nursing students' socialisation to motional management during early clinical placement experiences: A Qualitative Study. *Journal of Clinical Nursing, 29, 2508–2520.*

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Mgbekem, M. A., Neji, O. I., Lydia O, O., Felicia, L., Victoria K, U., Mary, O. A., & Catherine, C. (2016). Knowledge and application of reflective practice: A tool for meaningful nursing practice among nurses in University of Calabar Teaching Hospital Cross River State Nigeria. *International Journal of Nursing,* 2(2), 26–38.

www.eajournals.org

Mhango, L. (2021). *Assessing the Preceptorship Model in Clinical Teaching of Undergraduate Nursing and Midwifery Students in Malawi*. Doctoral-Thesis-Mzuzu University Digital Repository.

Mhango, L., Jere, D., Msiska, G., Chorwe-Sungani, G. & Chirwa, E. (2021). The roles and experiences of preceptors in clinical teaching of undergraduate nursing and midwifery students in Malawi. *Malawi Medical Journal.*

Miraglia, R. & Asselin, M. E. (2015). Reflection as an educational strategy in nursing professional development: An integrative review. *Journal for Nurses in Professional Development & Volume 31, Number 2, 62Y72.DOI:10.1097/NND.0000000000000151*

Mirlashari, J., Warnock, F., & Jahanbani, J. (2017). The experiences of undergraduate nursing students and self-reflective accounts of first clinical rotation in paediatric oncology. *Nurse Education in Practice,* 25, 22–28. https://doi.org/10.1016/j.nepr.2017.04.006

Momennasab, M., Ghanbari, M., & Rivaz, M. (2021). Improving nurses' knowledge, attitude, and performance in relation to ethical codes through group reflection strategy. *BMC nursing*, *20*, 1-9.

Msiska, G., Smith, P. & Fawcett, T. (2014). The "Lifeworld" of Malawian undergraduate student nurses: The challenges of learning in resource poor clinical settings. *International Journal of Africa Nursing Sciences.* https://doi.org/10.1016/j.ijans.2014.06.003.

Nelumbu, L. N. (2013). *An Educational Programme to Facilitate Reflective Practice for Registered Nurses in Training Hospitals in Windhoek* (Doctoral Dissertation).

Noora Ahmed, A. M., Al-Mutawa, Mohamed, H., Mahmoud, K. G., Baisa, Suhad, Daher-Nashif & Zelaikha Al-Wahedi (2024) Reflective writing among healthcare practitioners in primary care: a qualitative study from Qatar, Cogent Education, 11:1, 2373555, DOI: 10.1080/2331186X.2024.2373555

Nukpezah, R. N., Fuseini, A. T., Bawa, F., Napari, A. A., Wuffele, C., Asumadu, O. D. K., Peprah, W. & Asare, R (2021). Reflective practice: Its knowledge, practice and perception during COVID-19 among paediatric nursing students. *American Journal of Health, Medicine and Nursing Practice.*

Nurses and Midwives Council of Malawi, (2013) Standards for nursing and midwifery education, Lilongwe.

Nussbaum, M.C. (1990) Love's knowledge: Essays on philosophy and literature. *Oxford University Press, Oxford.*

O'Brien, B., & Graham, M. M. (2020). BSc nursing & midwifery students experiences of guided group reflection in fostering personal and professional development. Part 2. *Nurse Education in Practice*, *48*, 102884.

Oluwatoyin, F. E. (2015). Reflective practice: Implication for nurses. *Journal of nursing and health science*, *4*(4), 28-33.

Panda, S., Manjubala, D., John, J., Rath, K., Debata, A., Swain, D., Mohanty, K. & Eustace-Cook, J. (2021). Challenges faced by student nurses and midwives in clinical learning environment: A systematic review and meta-synthesis. *Nurse Education Today-Elsevier.* https://doi.org/10.1016/j.nedt.2021.104875.

Parwanda, G. (2023). Reflective approaches in nursing education and clinical practice. In *New Research in Nursing-Education and Practice*. Intech Open.

Patel, K. M., & Metersky, K. (2022). Reflective practice in nursing: A concept analysis. *International Journal of Nursing Knowledge*, *33*(3), 180-187.

Patel, S. (2023). "Role of reflection in education and practice in anesthesia: Purpose, process, pitfalls, and promotion." *International Medical Education*.

Phuma-Ngaiyaye, E., Bvumbwe, T. & Chipeta, M. C. (2017). Using preceptors to improve nursing students' clinical learning outcomes: A Malawian students' perspective. *International Journal of Nursing Sciences.*

Polit, D. F. & Beck, C. T. (2018). *Essentials of Nursing Research: Appraising Evidence for Nursing Practice.* 9th edition. Wolters Kluwen.

Pretorius, L. & Ford, A. (2016). Reflection for learning: Teaching reflective practice at the beginning of university study. *International Journal of Teaching and Learning in Higher Education.*

Reljić, N. M., Pajnkihar, M., & Fekonja, Z. (2019). Self-reflection during first clinical practice: The experiences of nursing students. *Nurse education today*, *72*, 61-66.

Richard, A., Gagnon, M., & Careau, E. (2019). Using reflective practice in interprofessional education and practice: a realist review of its characteristics and effectiveness. *Journal of interprofessional care*, *33*(5), 424-436.

Rothwell, C., Kehoe, A., Farook, S., & Illing, J. (2021). "Enablers and barriers to effective clinical supervision in the workplace: a rapid evidence review." *BMJ Open*, 11(9), e052929. doi:10.1136/bmjopen-2021-052929.

Saab, M. M., Kilty, C., Meehan, E., Goodwin, J., Connaire, S., Buckley, C., Walsh, A., O'Mahony, J., McCarthy, V. J. C. & Horgan, A. (2020). Peer group clinical supervision: Qualitative perspectives from nurse supervisees, managers, and supervisors. Elsevier. https://doi.org/10.1016/j.colegn.2020.11.004

Scheel, L. S., Bydam, J., & Peters, M. D. (2021). Reflection as a learning strategy for the training of nurses in clinical practice setting: a scoping review. *JBI Evidence Synthesis*, *19*(12), 3268-3300.

Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.

Shin, S., Lee, I., Kim, J., Oh, E., & Hong, E. (2023). Effectiveness of a critical reflection competency program for clinical nurse educators: a pilot study. *BMC nursing*, *22*(1), 69.

Smith, T. (2021, April). Guided reflective writing as a teaching strategy to develop nursing student clinical judgment. In *Nursing forum* (Vol. 56, No. 2, pp. 241-248).

Soroush, A., Andaieshgar, B., Vahdat, A., & Khatony, A. (2021). The characteristics of an effective clinical instructor from the perspective of nursing students: a qualitative descriptive study in Iran. *BMC nursing*, *20*, 1-9.

Sundler, A. J., Björk, M., Bisholt, B., Ohlsson, U., Engström, A. K., & Gustafsson, M. (2019). Student nurses' experiences of the clinical learning environment in relation to the organization of supervision. *Nurse Education in Practice*, *35*, 155-160.

Ticha, V., & Fakude, L. P. (2015). Reflections on clinical practice whilst developing a portfolio of evidence: Perceptions of undergraduate nursing students in the Western Cape, South Africa. *Curationis*, *38*(2), 1-8.

Weller-Newton, J. M., & Drummond-Young, M. (2023). Reflective practice in health professions education. In *Clinical Education for the Health Professions: Theory and Practice* (pp. 441-462). Singapore: Springer Nature Singapore.

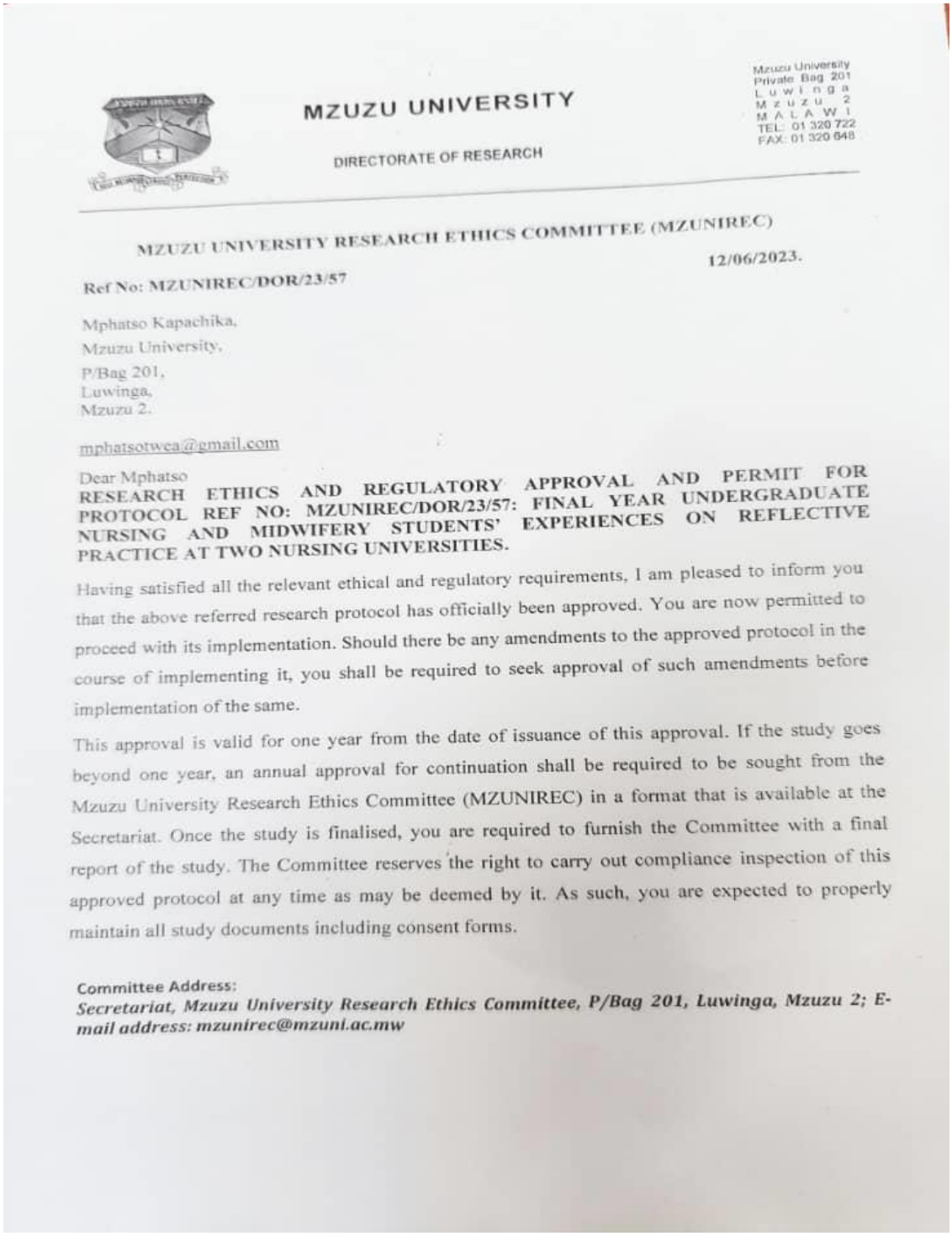
Yu, H. J., Ling, D. L. & Hu, J. L. (2019). Advancing the quality of care and nursing practice through emancipatory reflection. *Frontiers of Nursing • 6(1).* DOI: 10.2478/FON-2019-0002.

Zarrin, L., Ghafourifard, M., & Sheikhalipour, Z. (2023). Relationship between nurses reflection, self-efficacy and work Engagement: A multicentre study. *Journal of caring sciences, 12*(3), 155.

Zhang, J., Shields, L., Ma, B., Yin, Y., Wang, J., & Hui, X. (2022). "The clinical learning environment, supervision and future intention to work as a nurse in nursing students: a cross-sectional and descriptive study." *BMC Medical Education,* 22:548. doi:10.1186/s12909-022-03609-y.

APPENDICES

Appendix A: Ethical Approval Letter



MZUZU UNIVERSITY

DIRECTORATE OF RESEARCH

Mzuzu University
Private Bag 201
Luwinga
Mzuzu 2
MALAWI
TEL: 01 320 722
FAX: 01 320 648

MZUZU UNIVERSITY RESEARCH ETHICS COMMITTEE (MZUNIREC)

12/06/2023.

Ref No: MZUNIREC/DOR/23/57

Mphatso Kapachika,
Mzuzu University,
P/Bag 201,
Luwinga,
Mzuzu 2.

mphatsotwea@gmail.com

Dear Mphatso

RESEARCH ETHICS AND REGULATORY APPROVAL AND PERMIT FOR PROTOCOL REF NO: MZUNIREC/DOR/23/57: FINAL YEAR UNDERGRADUATE NURSING AND MIDWIFERY STUDENTS' EXPERIENCES ON REFLECTIVE PRACTICE AT TWO NURSING UNIVERSITIES.

Having satisfied all the relevant ethical and regulatory requirements, I am pleased to inform you that the above referred research protocol has officially been approved. You are now permitted to proceed with its implementation. Should there be any amendments to the approved protocol in the course of implementing it, you shall be required to seek approval of such amendments before implementation of the same.

This approval is valid for one year from the date of issuance of this approval. If the study goes beyond one year, an annual approval for continuation shall be required to be sought from the Mzuzu University Research Ethics Committee (MZUNIREC) in a format that is available at the Secretariat. Once the study is finalised, you are required to furnish the Committee with a final report of the study. The Committee reserves the right to carry out compliance inspection of this approved protocol at any time as may be deemed by it. As such, you are expected to properly maintain all study documents including consent forms.

Committee Address:
Secretariat, Mzuzu University Research Ethics Committee, P/Bag 201, Luwinga, Mzuzu 2; E-mail address: mzunirec@mzuni.ac.mw

Wishing you a successful implementation of your study.

Yours Sincerely,

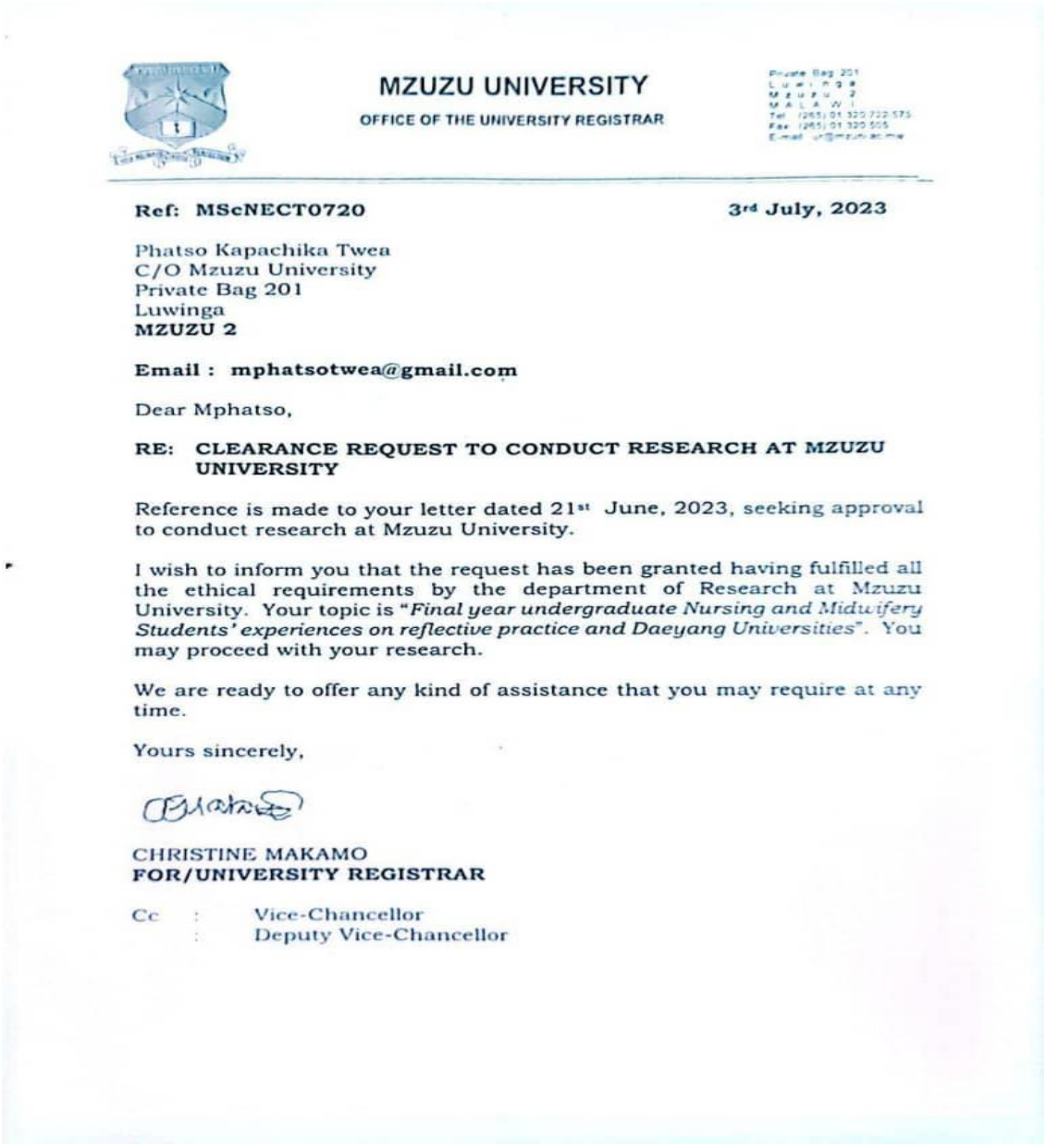
Gift Mbwele

SENIOR RESEARCH ETHICS ADMINISTRATOR

For: CHAIRMAN OF MZUNIREC

Committee Address:
Secretariat, Mzuzu University Research Ethics Committee, P/Bag 201, Luwinga, Mzuzu 2; E-mail address: mzunirec@mzuni.ac.mw

Appendix B: Permission Letter-MZUNI



MZUZU UNIVERSITY

OFFICE OF THE UNIVERSITY REGISTRAR

Private Bag 201
Luwinga
Mzuzu 2
MALAWI
Tel (265) 01 320 722/575
Fax (265) 01 320 505
E-mail ur@mzuni.ac.mw

Ref: MScNECT0720 **3rd July, 2023**

Phatso Kapachika Twea
C/O Mzuzu University
Private Bag 201
Luwinga
MZUZU 2

Email : mphatsotwea@gmail.com

Dear Mphatso,

RE: CLEARANCE REQUEST TO CONDUCT RESEARCH AT MZUZU UNIVERSITY

Reference is made to your letter dated 21st June, 2023, seeking approval to conduct research at Mzuzu University.

I wish to inform you that the request has been granted having fulfilled all the ethical requirements by the department of Research at Mzuzu University. Your topic is "*Final year undergraduate Nursing and Midwifery Students' experiences on reflective practice and Daeyang Universities*". You may proceed with your research.

We are ready to offer any kind of assistance that you may require at any time.

Yours sincerely,

CHRISTINE MAKAMO
FOR/UNIVERSITY REGISTRAR

Cc : Vice-Chancellor
: Deputy Vice-Chancellor

Appendix C: Permission Letter-Daeyang University

DAEYANG UNIVERSITY

QUALITY ASSURANCE COORDINATOR, PO BOX 30330, KANENGO, LILONGWE.
Email: maluwav@dyuni.ac.mw

Mphatso Kapachika
Mzuzu University
Nursing & Midwifery Dept.
P/Bag 201
Luwinga
Mzuzu 2

Dear Mphatso,

PERMISSION TO CONDUCT A RESEARCH PROJECT AT DAEYANG UNIVERSITY, COLLEGE OF NURSING AND MIDWIFERY

This is to inform you that your request to conduct a research project titled **Final year undergraduate nursing and midwifery students' experiences on reflective practice at two nursing universities** at Daeyang University is granted with pleasure.

You are advised to stick to your protocol and ensure that your data collection exercise does not disturb the students' classes.

Yours Sincerely,

Veronica Maluwa PhD

Quality Assurance Coordinator

Appendix D: Informed Consent

Information Sheet and Consent to Participate in Research

Date: **January, 2023**

Dear Sir/Madam

My name is **Mphatso Kapachika**, a nursing student pursuing Master's degree in the Department of Nursing and Midwifery at Mzuzu University. As part of the requirement for my degree, I am required to conduct a research study.

You are being invited to consider participating in a study that involves research (Experiences of Reflective practice among final year undergraduate nursing and midwifery students at Mzuzu and Daeyang Universities).

The aim and purpose of this research is to explore and establish the students' knowledge, practice, challenges and clinical support and supervision regarding reflective practice.

The study is expected to enrol a total of 130 final year undergraduate nursing and midwifery students at Mzuzu and Daeyang Universities.

It will involve conduction of two focus group discussions (one at each institution) containing 6 final year students each and self-administered survey questionnaire to the remaining participants.

The duration of your participation if you choose to enrol and remain in the study is expected to be 1 hour. The study is self-funded.

The study may involve risks and/or discomforts such as participants feeling tired from participating in the discussion. In order to compensate for this risk, a short 5-minute break will be given to the group.

The study may not provide direct benefits to you as a participant; however, it will enable us to understand the experiences that undergraduate nursing and midwifery students have regarding reflective practice. The results of the study may potentially help in improving nursing students' theoretical preparation, clinical instruction, support and supervision.

Your participation in this research is voluntary and you may withdraw from the study at any point. You will not incur penalty or loss of treatment or other benefit to which you are normally entitled in the event that you refuse or withdraw your participation from the study.

There are no potential consequences to you for withdrawing from the study and the procedure/s required from you for orderly withdrawal.

There are no expected costs that you will incur as a result of your participation in the study. You will not be provided any incentive to take part in the research study.

During the focus group discussion, a tape recorder maybe used to record the discussion for write up purposes. Anonymity will be used at all times during focus group discussions and individual interview whereby the participant will be given a number or letter for identification purposes. All biographical personal information obtained from you is confidential. During the research write up, excerpts from the discussion maybe used for reference but your name will not be used. All data obtained from you will then be safely stored in a secure safe place in the research supervisor's office for a period of 12 months after which it will be erased/ or shredded.

This study has been ethically reviewed and approved by the Faculty of Health Sciences Research Committee and Mzuzu University Research Ethics Committee (approval number MZUNIREC/DOR/23/57)

In the event of any problems or concerns/questions you may contact **Mphatso Kapachika (Miss), Mzuzu University, Private bag 201, Luwinga, Mzuzu 2, Phone: 0993274695, email: mphatsotwea@gmail.com** or the Faculty of Health Sciences Research Committee, contact details as follows:

Mzuzu University

Faculty of Health Sciences Research Committee

P/ Bag 201

Mzuzu

+265111401932

Certificate of Consent

I _____ have been informed about the study entitled Experiences of final year undergraduate nursing and midwifery students on reflective practice at two nursing colleges being conducted by Mphatso Kapachika, a MscNECT student at Mzuzu University.

I understand the purpose and procedures of the study.

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

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any treatment or care that I would usually be entitled to.

I have been informed about any available compensation or medical treatment if injury occurs to me as a result of study-related procedures.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at Mzuzu University, Private Bag 201, Luwinga, Mzuzu, telephone number is 0993274695, and email address mphatsotwea@gmail.com.

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

MZUZU UNIVERSITY RESEARCH ETHICS ADMINISTRATION

Faculty of Health Sciences Office

Mzuzu University

Private bag 201

Luwinga

Mzuzu

Tel: +265111401932

_____ _____

Signature of Participant **Date**

Appendix E: In-Depth Interview Guide

Purpose: To assess experiences of Reflective Prctice among final year undergraduate nursing and midwifery students at two nursing universities.

Participant IDs: Assessor:

Date of data collection: (dd/mm/yyyy) College:

Ages: Gender: ☐Male ☐Female

In the next set of questions, I would like to ask you about your experience with reflective practice.

I understand you have been practicing reflection since the first year of your studies where you used reflective writing.

1.0 Knowledge

1.1 Can you tell me, what does reflection mean to you?

1.2 Where did you learn reflection from?

1.3 How do you describe the learning process of reflection?

1.4 How does reflection help you when faced with a difficult situation?

1.5 How useful do you think reflection is to you?

2.0 Practice

2.1 Tell me, how you have practiced reflection? (How often, where)

2.2 What makes you practice reflection?

2.3 What have been the outcomes of your reflection?

2.4 What difference do you observe between yourself and those that do not practice reflection?

3.0 Barriers

3.1 What are the things that make you fail to practice reflection?

4.0 Clinical support and supervision

I understand that almost 60% of your study time you are in the clinical area to integrate theory into practice where qualified nurses assume the role of teaching.

1) In your opinion, in what situations do qualified nurses practice reflection?
2) What support do qualified nurses give you regarding reflective practice?
3) How would you want to be supported when reflecting in the clinical area?

Do you have any other comments? (Overall)

End of Questions!! Thanks so much for your time and input!!

Appendix F: Survey Questionnaire

Purpose: To assess experiences of reflective practice among final year undergraduate nursing and midwifery students at two nursing universities.

Participant ID: Assessor:

Date of data collection: (dd /mm/ yyyy) College:

Age: Gender: ☐Male ☐Female

In the next set of questions, I would like to ask you about your experience with reflective practice.

I understand you have been practicing reflection since the first year of your studies where you used reflective writing and/or journaling.

1.0 Knowledge

Please tick the most appropriate answer (single answer)

1.6 Meaning of reflective practice to you

☐Own definition of a happened event

☐Looking back

☐Reviewing actions

☐Critical thinking

1.7 Where did you learn reflection from?

☐Lecturer in the classroom as a teaching and learning method

☐An explanation from a colleague at clinical area

☐Qualified nurse

☐Internet

☐Others (specify)

1.8 How do you describe the learning process of reflective practice?

☐Normal as any lesson

☐Easy

☐Difficult

1.9 How does reflection help you when faced with a difficult situation? (**Multiple answer allowed)**

☐It guides the selection of actions in similar situations in future.

☐It leads to a better understanding of the situation

☐It results in emotional growth

☐It leads to early recognition of the similar event and prompt actions to avert it.

1.10 Does reflection influence your actions and reactions towards situations?

☐Yes

☐No

1.11 Do you think reflective practice is useful to you?

☐Yes

☐No

2.0 Practice

Please tick the most appropriate answer

2.1 Tell me, do you practice reflection?

☐Yes

☐No

2.2 How often do you practice reflection?

☐Rarely

☐Often

☐Very often

2.3 When do you practice reflection?

☐During clinical practice

☐During classroom learning

☐Both during clinical practice and classroom learning

2.4 What makes you practice reflection? (**Multiple answers allowed)**

☐It provides a satisfactory outcome of learning / care

☐It builds emotional maturity as I reflect on negative events.

☐It boosts confidence

☐It shapes future actions/ interventions in similar situations

2.5 What have been the outcomes of your reflection?

☐Resulted in modification of future actions in similar situation

☐Provided satisfactory outcomes on similar events.

☐Enhanced my emotional Strength

☐I regretted practicing reflection

2.6 Has reflective practice influenced how you perceive situations?

☐Yes

☒No

2.7 Do you observe any difference between yourself and those that do not practice reflection?

☐Yes

☐No

2.8 Are your care outcomes better than those who do not practice reflection?

☐Yes

☐No

3 Barriers

3.1 Have you ever failed to reflect on some situations before?

☐Yes

☐No

3.2 What made you fail to practice reflection? (**Multiple answers allowed)**

☐Lack of knowledge about reflection

☐Lack of time

☐Emotional consequences

☐Unsupportive Clinical learning Environment

☐Unable to identify events/situations to reflect upon

3.3 Based on your answers, will you consider recommending reflection to any of your colleagues?

☐Yes

☐No

4 Clinical support and supervision

I understand that almost 60% of your study time you are in the clinical area to integrate theory into practice where qualified nurses assume the role of teaching.

4.1 Do you receive support from qualified nurses regarding reflective practice?

☐Yes

☐No

4.2 Do you think support from qualified nurses regarding reflection is essential?

☐Yes

☐No

4.3 I need support and guidance from the qualified nurses to help me identify issues for reflection.

☐Disagree

☐Not sure

☐Agree

4.4 Qualified nurses should be consistent in giving advice on reflection to avoid confusion.

☐Disagree

☐Not sure

☐Agree

4.5 Qualified nurses are interested in supporting me with reflection

☐Yes

☐No

4.6 I am happy with the support qualified nurses provide to me regarding reflective practice.

☐Yes

☐No

4.7 Qualified nurses are equipped with knowledge on reflective practice

☐Disagree

☐Not Sure

☐Agree

4.8 Qualified nurses engage in reflective practice

☐Yes

☐No

End of Questions!! Thanks so much for your time and input!!

Appendix G: Transcription Sample

R : Okay, thank you so much. I understand you have been practicing reflection since the first year of your studies… so, what does reflection mean to you?

ID 5 : *To me reflection is a process of reflecting on what you did; wrong or right at clinical area, after reflecting we evaluate the actions and re-plan… I can say it is a review of previous actions.*

ID 3 : *A process of identifying a unique scenario during practice and understand how the scenario or procedure was supposed to be tackled and how others helped during the process.*

ID 4 : Just to add that it is not only at clinical area but it can also be elsewhere

ID 2 : It is like you find gaps…or what went wrong and what went right and try to fix those gaps for future improvement.

ID 1 : Ok for me reflection is eer… like looking back at a situation or event that happened, like in the evening or during break time when something happens or I met a difficult situation, I let my mind go back and analyse the whole event mmh… for example how I handled a situation, right or wrong, then I learn from that situation how to handle it in future.

R : Alright…ID 6 do you have anything to add?

ID 6 *: No, I agree with what my colleagues have said.*

R : Okay. Where did you learn reflection from and how was the learning process?

ID 5 : *We learnt in class in our first year during fundamentals of nursing*

ID 6 : And it was repeated in our second year. We used Gibbs reflective cycle. This model has steps… so it's like one has to follow those steps to reflect effectively… it needs a lot of time. However, the lesson itself was just as any other lesson.

ID 1 : For me it was an interesting lesson and after learning I was eager to practice but when I was allocated to my first clinical area, I did not see any qualified nurse doing it and I thought it was just theory until towards the end of that allocation when our

lecturer told us to reflect on the whole allocation and write a reflective account using Gibbs reflective cycle. It is doable.

ID 2 : The theory part was ok with me but when it was time to practice, I had difficulties, I used to ask friends to help me with the write-up. The qualified nurses could not give me the support I needed because they did not know the Gibbs reflective Cycle…that's why I was consulting my friends.

ID 4 : I want to agree with ID 2 because usually we practice reflection at the clinical area where our lecturers can come for support once and we rely on qualified nurses in that clinical area to teach and supervise us but it seems they lack knowledge on reflection especially on use of reflective models.

R : Ooh ok, that is an interesting observation. Anybody to add?

All : *No*

R : Let us move on to the next question then. According to your experience, how useful is reflection?

ID 3 : *It helps me identify areas that need improvement*

ID 5 : That is true because one develops a plan on how best to tackle a situation should it repeat itself thereby helping us to improve our skills and practice.

ID 1 *: It is a learning process… helps one to learn from a happened event*

ID 4 *: It also helps us to avoid repeating the same mistakes when providing care to our patients.*

ID 6 *: It acts as a guide or reference if you encounter the same scenario in future*

ID 2 *: I think it also helps us think critically about anything and everything eer… I can give an example like when there is an emergency case, one is able to think and act quickly.*

ID 4 *: I just want to add that it also helps with emotional maturity. Like when I was in first year I used to cry whenever my patient has died but after several reflections I matured emotionally as I no longer cry (laughs) not that crying is bad but I realised my crying affected my care provision as well because I couldn't take a role of a comforter… I would always want to be comforted as well. Instead of crying I now comfort the bereaved family and make sure my patient has a respectful last office.*

R : Thank you for the addition. Now, you guys indicated in your responses earlier that you usually practice reflection during clinical allocation and that you use Gibbs reflective cycle. I want to understand what makes you practice reflection and how often you practice it.

ID 1 *: I reflect whenever I meet a difficult or challenging situation like new case scenarios. As to how often mmh… it just depends… because it is not all the time, I use Gibbs reflective cycle because it is time consuming. Sometimes you don't have time to write all the steps but, in the mind, you cruise through the steps maybe for two minutes and come up with the best way of handling that situation. I reflect everyday but because most of the times I don't write my lecturer can think I don't practice reflection.*

ID 4 *: For me it depends on the ward I am allocated to. I find it difficult to reflect when allocated to busy areas or wards due to time factor but it must be promoted. I do reflect when I want to make a critical decision about my patients 'care.*

ID 2 *: Like during clinical allocation every student is supposed to find situations; good or bad to reflect on or sometimes a student is asked to reflect on the whole clinical placement and write a report using the Gibbs reflective cycle that we learnt.*

R : Ok thank you. So, after all these years of practicing reflection what difference do you observe between you and those that do not practice reflection?

ID 6 *: Eer… it is difficult to know if others engage in reflective practice or not.*

ID 3 *: Those who do not practice reflection do not change their way of caring for patients. They repeat the same mistakes. Those who practice reflection improve skills and provide patient-centred care.*