

Exploring mentoring for hospital nurses/midwives in Uganda: A mixed methods study

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DECLARATION

I certify that this thesis:

1. does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university
2. and the research within will not be submitted for any other future degree or diploma without the permission of Flinders University; and
3. to the best of my knowledge and belief, does not contain any material previously published or written by another person except where due reference is made in the text.

Signed..... **Tracy A Kakyo**.....

Date.....**07/03/2024**.....

Dedication

To my son Kyle Victor Komagum Apuuli and to my daughter Kourtney Maria Kemigisa

Abwooli, you give me reason to try again every day.

To my mum Teddy Mbabazi Abwooli, whose arm of support can be felt in my every
endeavour.

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List of publications and presentations

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Kakyo, A. T., Xiao, L. D., & Chamberlain, D. The stakeholders' role in informal mentoring: Perspectives of nurses and midwives working in acute care settings. (Under review).

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Summary

Background: Mentoring is a professional development strategy that has been utilised in addressing workplace issues such as recruitment, retention, career progress, and incivility. Mentoring effectiveness and success depend on various factors, including individual characteristics, personal beliefs, and mentoring perceptions. Mentoring should be based on reciprocity, where both the mentor and mentee have equal responsibilities and shared outcomes. The outcomes of mentoring depend on the quality of interactions between the three stakeholders: the mentor, the mentee, and the organisation. Previous literature indicates that mentoring is an underexplored concept in Uganda.

Aim: This study aimed to characterise mentoring for nurses and midwives working in Ugandan hospitals.

Methods: This study used a two-phase sequential explanatory mixed method design underpinned by Dewey's pragmatism. The first phase involved a cross-sectional study that identified mentoring dimensions and associated factors. The second phase was a qualitative descriptive study that explored perceptions, experiences, and expectations of mentoring among nurses and midwives. The quantitative data was analysed using SPSS version 27 and Hayes PROCESS macro while reflective thematic analysis was used for the qualitative data.

Results: The findings indicate that mentoring among nurses and midwives in Uganda is primarily informal and is characterised by high-quality relationships. However, instances of negative mentoring experiences and perceptions were also identified. The study indicates that positive or negative mentoring did not directly associate with the common mentoring outcomes, such as willingness to participate in future mentoring, intentions to stay at the organisation, and career advancement. Instead, the indirect relationships of mentoring experiences were observed via social exchange orientation, perceived organisation support, and self-efficacy.

Qualitative findings were presented as nine main themes and described as beliefs about mentoring, the need for mentoring in clinical practice, the roles played by different stakeholders, development of the mentoring relationship, mentoring processes, positive experiences realised from mentoring, negative aspects of mentoring, obstacles to mentoring and opportunities for mentoring in the workplace. These themes explained, confirmed, and sometimes produced discordant findings to the quantitative results.

Conclusion: This study delves into the relational and organisational contexts of informal mentoring experienced by nurses and midwives in hospital settings in Uganda, shedding light on significant and context-specific issues. The findings of this study contribute valuable insights and knowledge regarding the experiences and perceptions of informal mentoring among nurses and midwives. Moreover, in conjunction with existing research evidence, the researcher proposes a novel framework called the "mentoring egg framework" to illustrate the contextual nature of mentoring and to foster the development of high-quality mentoring programs for nurses and midwives within Ugandan hospitals.

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Abbreviations

WHO	World Health Organisation
UNMC	Uganda Nurses and Midwives' Council
MOH	Ministry of Health
CPD	Continuous Professional Development
NGO	Non-Governmental Organisation

Glossary of terms

Mentoring	Mentoring is defined as a professional development approach in which nurses/midwives and the hospital interact in a reciprocal manner with the goal of helping the new nurse/midwife adapt to and socialise in clinical practice. In this interaction there are responsibilities and benefits for the mentor, the mentee, and the organisation; fulfilment of which leads to an effective relationship.
Mentor	A mentor is someone with competency that is admirable to the rest of his peers with potential to pass on the knowledge and skill as well as model good professional attitude.
Mentee	A mentee is someone with the willingness and motivation to learn from a mentor.
Formal mentoring	Formal mentoring is a mentoring relationship that is initiated by the organisation/hospital. The organisation does this by matching the mentor and mentee, providing coordination for mentoring activities and providing training on mentoring
Informal mentoring	Informal mentoring is any mentoring relationship initiated and sustained by the nurses/midwives with their colleagues or supervisors.
Hospitals	An organisation providing nursing and/or midwifery care to patients. In this study, the word hospital is used synonymously with acute care settings, clinical settings and healthcare settings. The term is used to exclude rehabilitation care, community, or nursing home settings.

Nurse	A healthcare professional providing direct patient care to patients in the hospital within outpatient, emergency, and admission departments. Registered by the Uganda Nurses and midwives Council to work as enrolled nurse, registered nurse or bachelor nurse.
Midwife	A healthcare professional providing direct care of a woman and their child from pre-conception to postnatal period within the hospital settings. Registered by the Uganda Nurses and midwives Council to work as enrolled midwife, registered midwife or Bachelor midwife.

CHAPTER 1: INTRODUCTION

1.1 Chapter introduction

Mentoring as a professional development concept has benefits across professions (Allen et al., 2004; Mullen & Klimaitis, 2021). This thesis set out to study the concept among hospital nurses and midwives in Uganda. The first chapter introduces the abstract history and understanding of mentoring to provide a background for the study. The aims and objectives are stated. The chapter concludes by delineating the significance of this study for the profession and healthcare settings.

1.2 Background

Socialisation into practice and adaptation into clinical settings mark the start of a career in the nursing profession for novice nurses. According to Benner, a novice nurse is an individual in the early stages of their nursing career and possesses limited clinical experience (Benner, 1982, 2021). They lack confidence which affects their ability to demonstrate their competence, and they may be unable to cope with increased workloads. Proper socialisation with colleagues enables the new nurse to integrate into the workforce and understand the profession's values, beliefs, and practices (Maginnis, 2018). Adaptation focuses on the transition from a nursing student to a nurse capable of independent practice (Hunter & Cook, 2018). Poor socialisation and adaptation can cause isolation in the workplace, poor teamwork, and low job satisfaction. Mentoring activities such as role modelling, teaching, and learning have been known to ease the transition and enable new nurses to adapt to nursing practice in their organisation's context (Bifarin, 2016).

Although mentoring in nursing did not appear in the literature up until the late 20th century (McCloughen et al., 2006; Vatan & Temel, 2016), it is important to note that it already existed from the time of the inception of modern nursing founded by Nightingale. Florence Nightingale is documented to have mentored her favourites. In the document by Lorentzon and Brown (2003), Nightingale is shown to have kept in contact with her mentees through occasional meetings and, more frequently, by writing letters to them. Nightingale may not have defined mentoring, but clearly, she mentored her novices, taking them through the demands of their career and supporting them in their personal growth. These mentoring activities have been grouped into two major roles (Ragins & Kram, 2007). In which

mentoring provides career functions and psychosocial support functions. At the same time, other authors considered role modelling an independent function of mentoring (Inzer & Crawford, 2005; Jacobi, 1991). These functions contribute to the meaning of mentoring.

1.2.1 What is mentoring?

Scholars argue the relevance of a definition for mentoring since it helps with objectivity in research. Nelda (2021), contends that mentoring has been confused with preceptorship in nursing. In reviewing education, psychology, and organisation literature, Jacobi (1991) found 15 definitions of mentoring. Haggard et al. (2011) had similar findings quoting another eight definitions of mentoring. The quest to find one single definition for mentoring has yet to yield results; this is further made more difficult by mentoring differing in its application in clinical practice, nursing education, and aged care settings.

Bowen defines mentoring as a process that *“occurs when a senior person (the mentor) in terms of age and experience undertakes to provide information, advice, and emotional support for a junior person (the protégé) in a relationship lasting over an extended period of time and marked by substantial emotional commitment by both parties. If opportunity presents itself, the mentor also uses both formal and informal forms of influence to further the career of the protégé”* (Bowen, 1985, p. 31).

Over the years, mentorship has gone through an evolution. It evolved from times when knowledge was possessed by a few experts and handed down to novices. In those times, workplaces were stable; now, they are dynamic and complex. The mentee had nothing to contribute to the mentoring relationship. Technology has advanced. These changes affect the classic attributes of mentoring. In the current status of mentoring relationships, the mentor is not always older. For example, the nursing workforce is characterised by older staff returning into practice as well as young new graduates, super-specialisation of the nursing workforce means a new graduate would need multiple mentors, and the dynamic nature of the clinical setting signifies that mentoring relationships are shorter in duration. As a result, mentoring emerges as a mutually beneficial endeavour with the potential to yield benefits for all stakeholders involved. Stewart and Krueger (1996) developed a theoretical definition of mentoring in nursing:

Mentoring in nursing *“is a teaching-learning process acquired through personal experience within a one-to-one, reciprocal, career development relationship between two individuals diverse in age, personality, life cycle, professional status, and/or credentials. The nurse dyad*

relies on the relationship in a large measure for a period of several years for professional outcomes, such as research and scholarship; an expanded knowledge and practice base; affirmative action; and/or career progression” (Stewart & Krueger, 1996, p. 315). Vance and Olson (1998) believed that the mentor connection was a developmental, empowering, and nurturing endeavour that occurred in an environment characterised by respect and equal responsibility of those involved. Weese and colleagues contend that the organisation for which the mentee and mentor work has a role to play in the mentoring relationship. They argue that mentoring is a triad relationship. The authors define mentoring as a deliberate long-term career development relationship between a more competent nurse, a less competent nurse, and the organisation where they work (Weese et al., 2015).

The present study has considered the definition of mentoring in the literature and proposes a definition to suit this study context as described in the following:

Mentoring is a professional development approach in which parties/stakeholders interact in a reciprocal manner with the goal of helping the new graduate adapt to and socialise in clinical practice in nursing and midwifery. In this interaction there are responsibilities and benefits for the mentor, the mentee, and the organisation; fulfilment of which leads to a splendiferous relationship.

1.2.2 The mentoring processes.

In her study of organisational managers, Kram described four progressive mentoring stages: initiation, cultivation, separation, and redefinition (Kram, 1983). Mills and the colleague also found similar stages of mentoring in their study of nurse mentor-mentee relationships (Mills et al., 2008a). According to Kram, the first stage is initiation. During this beginning phase, the mentee presents themselves as someone willing to be mentored. The mentor presents themselves as someone with a competency that is admirable to the rest of his peers with the potential to pass on the knowledge, skill, and role model attitude. Each party revisits its internal motivation for getting into the mentoring relationship. There are various opportunities to develop the initiation phase; Kram gives examples of interviews, interaction at work assignments, or born out of direct supervision or by recommendation. This phase can occur during planned orientation or accidental face-to-face interaction in clinical settings. Mills et al. (2008a) found the initial stage to the growth stage in which the dual focused on acquainting themselves. Bower called this phase a goal-setting stage. The mentor identifies the suitable novice to mentor, and the mentee might also approach the suitable expert

(Bower, 2000). According to Bower, for a successful progression through this phase, the mentor must be willing, dedicate the time, and have the necessary skill to offer the mentee. This stage is affected by proximity. Those that meet face-to-face spend a shorter time in this phase. Although distance mentoring is possible, it takes more time to get through this initial phase (Bower, 2000).

The second phase Kram named it cultivation. During this time, the mentor identifies resources and opportunities to enable the mentee to achieve their goals. The mentor coaches, counsels, teaches, offers assignments, and identifies sponsorships to help the mentee meet their career and psychosocial development targets (Kram, 1983). During this phase, the mentor derives satisfaction from knowing they have done their best to influence the mentee. As the mentee continues to mature (grow against the competence scale) during this phase, they begin relieving their senior of their routine responsibilities, such as mentoring another junior staff. Mills et al. (2008b) called this phase *walking with another*. During this period, the mentee is provided valuable opportunities to engage in various clinical tasks and responsibilities actively. First, they are allocated more stable patients, and slowly they are exposed to more critical patients demanding skill and speed. This phase can be impacted by factors such as the level of trust and support within the practice environment (Mills et al., 2008b).

In the third stage, Mills and colleagues show the outcome of the mentoring relationships not as an end but as one of continued reflection on practice (Mills et al., 2008b). During the third phase, the mentoring relationship ceases to become the central focus of each party's work life (Kram, 1983). For a successful move through this phase, emotional separation should coincide with structural separation; otherwise, anxiety for the mentee and resentment for the mentor will result, indicating a dysfunctional interaction. In this period, mentees can prove their independence, and mentors can show their ability to mentor a junior.

Redefinition, as the final stage, represents the relationship graduating to that of a colleague with an equal bearing. The mentoring roles can reverse in this phase depending on the circumstance (Stewart & Krueger, 1996). Therefore, this stage is marked by the mentee attaining equal status as the mentor, the mentee shifting goalposts and becoming a mentor, or when the mentee obtains the professional role/identification for which they needed mentoring (Bower, 2000). Nevertheless, the mentee consistently recognises and acknowledges the

crucial role played by the mentor in their personal and professional development (Kram, 1983). These phases of mentoring apply to both informal and formal mentoring.

1.2.3 Traditional forms of mentoring

Informal mentoring exists when the relationship between mentor and mentee arises naturally, entering a mutual agreement to carry on the relationship for their personal and professional growth (James et al., 2015). Informal mentoring relationships are voluntary and self-directed, benefiting the dyad involved in the interaction. This relationship typically follows the phases of mentoring lasting for a long time. It is based on the mutual understanding of parties; therefore, they have a natural chemistry that makes the relationship functional. However, it is important to note that the informal mentoring relationship typically lacks active engagement from the organisation, often existing outside of the awareness and commitment of the hospital (Mullen & Klimaitis, 2021). This has implications for the relationship. Firstly, certain individuals who possess significant potential as mentors may not be actively sought out by mentees. Conversely, some mentees may hesitate to approach potential mentors due to factors such as differences in personality or belonging to minority groups, which may make it challenging for them to reach out for assistance. (Ragins, 2016). Secondly, the process will not be supported with resources. Thirdly, the efforts of the stakeholders might not be recognised and therefore rewarded. For example, promotions and career progress opportunities will not be offered based on participating in the mentoring relationship. This makes the process frustrating for the mentor and mentee, creating the potential for leaving the organisation. Finally, the organisation might not directly benefit from an informal mentoring relationship. Due to these challenges, formal mentoring may be preferred over informal mentoring in hospital settings.

Formal mentoring relationships are initiated by the organisation to support the early career nurse's adaptation to the workplace. They are very structured with responsibilities for the mentee, mentor, and organisation (Mullen & Klimaitis, 2021). The mentee is responsible for proactively identifying their learning needs, attending mentoring meetings, and being reflective (Burgess et al., 2018). The mentor's responsibility, on the other hand, is about availing themselves to the mentee and assisting the mentee through mentoring activities such as coaching, teaching, and modelling. The organisation supports this relationship by coordinating a structured program, matching the mentor and mentee, soliciting training for the mentor and mentee that enables them to carry out their responsibilities, and providing

rewards for engaging in a mentoring relationship (Zhang et al., 2016). To perform their responsibilities, stakeholders must have characteristics that enable a successful mentoring relationship. Important characteristics of a mentoring relationship for the mentee include personality, age, and tenure in the organisation (Giacumo et al., 2020). While for the mentor's personality, age, work experience, previous experience as a mentor or mentee, and the organisation, a mentoring culture and a positive work environment are vital attributes for a supportive organisation (Klinge, 2015). The responsibilities and characteristics of the stakeholders work towards a positive outcome of a mentoring relationship.

Formal mentoring for the mentee leads to improved clinical competence, career growth, and self-confidence, expands the mentee's network, and offers them a sense of security in the workplace (Chen & Lou, 2014; Zhang et al., 2016). For the organisation, a mentoring program is a human resource strategy for recruiting new graduates, improving hospital retention, and decreasing nurse turnover rates (Chen & Lou, 2014; Rush et al., 2019). While to the mentor, the mentoring program improves their visibility within the organisation, impacts their competence contributes to their career growth and self-worth (Goodyear & Goodyear, 2018). However, sometimes the relationship does not work as expected, resulting in consequences for the mentee, mentor, and organisation and a dysfunctional relationship. These dysfunctional relationships are characterised by dishonesty, lack of commitment to the relationship from either of the three parties, intimidation, and overly dependent mentees, all of which limit the adaptation of the mentee into the workplace (Eby, 2007; Ragins, 2016). Furthermore, the mentee goes on to model the bad behaviour they were socialised into. The resultant effect is a practice environment characterised by hostility and horizontal violence (Frederick, 2014). The organisation may be faced with a dissatisfied worker leaving the workplace resulting in a high turnover rate. In order to increase the chances of a mentoring relationship being more beneficial than dysfunctional, several mentoring models have been applied to the nursing workforce in clinical settings.

There are several quality improvement projects aimed at socialising and helping new graduate nurses adapt to practice. In their review of mentoring programs, Chen and colleagues found that most programs run between 3 months and one year. The mentoring models involved selecting mentors, training mentors, engaging in a mentoring relationship where the dyad meets frequently, and concluding the relationship with evaluation by all stakeholders (Chen & Lou, 2014). Although these mentoring programs are effective, none of those reviewed models are from contexts similar to Uganda. For most African countries,

mentoring programs for nurses/midwives target specific purposes other than adaptation to practice. The programs focus on particular goals such as HIV management, using evidence-based practice, and improving the quality of care (Magge et al., 2015; Ojemeni et al., 2017). While recognising the significance of these activities within the context of mentoring, it is important to acknowledge that they do not provide a comprehensive depiction of the entirety of the mentoring process. Some critics argue that these are education strategies or brief mentoring episodes (Mullen & Klimaitis, 2021; Ragins, 2012). Furthermore, no formal mentoring programs for nurses and midwives exist in clinical settings in Uganda to support their socialisation and adaptation to practice.

1.3 The Ugandan context

The Ugandan healthcare system is burdened by infectious and non-infectious diseases (Centers for Disease control and Prevention, 2019). The nursing profession being the largest health workforce is charged with the care of these patient numbers in hospitals (World Health Organisation, 2020b). The nurse-to-patient ratio in Ugandan hospitals is at 0.648 per 1000 population (World Health Organisation, 2017), which is below the recommendations of the WHO. This can be overwhelming for the new nurse starting their career in a hospital in Uganda. Furthermore, Uganda's nursing and midwifery workforce primarily consists of professionals who possess lower qualifications when compared to their international counterparts (World Health Organisation, 2020b). Other workforce challenges include understaffing, high workload, and lack of resources (Kakyo & Xiao, 2019; Namaganda et al., 2015). All these challenges affect the quality of care as an output of nurses' work. Due to the challenges at the workplace, the nurses, for lack of better opportunities, often stay in practice but remain demoralised (Bancroft, 2006; Kakyo & Xiao, 2019). The highly qualified nurses leave the Ugandan workforce for overseas practice while others change professions (Bancroft, 2006; Nguyen et al., 2008). This leads to poor adaptation in practice observed through factors such as absenteeism, workplace violence, and bad nursing image in the media. The Ugandan media has several stories showing the public's dissatisfaction with the healthcare workforce in hospitals (Marquette et al., 2019). Mentoring in literature has been shown to address these workplace issues, socialise good nursing behaviour, and help new nurses adapt to practice (Chen & Lou, 2014; Zhang et al., 2016).

Mentoring for nurses and midwives in the clinical area is not explicit in organisational policies for Uganda. More commonly, Uganda has emphasised support for students and has a

running internship program for nurses/midwives (Ssemata et al., 2017). Also important in this study are the various clarifications of Uganda's nursing and midwifery cadres. The nursing and midwifery fraternity is largely composed of enrolled nurses whose highest qualification is a certificate in nursing or midwifery (World Health Organisation, 2020b). The UNMC registers nurses/midwives with a diploma with the practicing title of a registered nurse (Uganda Nurses and Midwives Council, 2022). These are the second largest cadre of nurses/midwives. Nurses and Midwives with bachelor's degrees are registered by the UNMC as registered Bachelor of Science Nursing or midwifery nurses/midwives (Uganda Nurses and Midwives Council, 2022). Therefore, whereas mentoring is well studied in the literature, it unfolds differently in the light of contextual factors that characterise the Ugandan nursing/midwifery workforce.

1.4 Aim of the study

The aim of the was to characterise mentoring for hospital nurses and midwives in Uganda. Under this aim, the present study aimed to achieve these specific objectives:

Objectives

1. To determine the key mentoring dimensions that exist in the nursing and midwifery workforce in hospital settings in Uganda.
2. To determine the factors that affect mentoring dimensions for the nursing and midwifery workforce in hospital settings in Uganda.
3. To explain nurses' and midwives' perceptions and expectations of nurses and midwives towards mentoring in hospital settings in Uganda.

1.5 Significance of the study

Nursing workforce issues of retention, negative professional image and a non-progressing workforce can be addressed through a formal mentoring program. Designing a mentoring program with the goal of socialising novice nurses and helping them adapt to practice is beneficial to the novice nurse, senior nurse and the hospital as organisations. In spite of the known benefits, the use of mentoring programs has not been explored for nurses in hospitals in Uganda. This study sought to make an original contribution by filling the gap in research and practice through exploring stakeholder readiness and perception of nurses/midwives working in hospital settings for a formal mentoring program. Findings of the study can inform future mentoring practices through identifying opportunities for mentoring within the

organisation. The mentoring dimensions and associated factors can inform development of a mentoring framework that is suitable for the individual and organisational context in Uganda.

1.6 Chapter Summary

This chapter offers a comprehensive overview of the background and historical context of mentoring in a global perspective, highlighting the consensus regarding its benefits in nursing and midwifery practice. While mentoring programs have been extensively reported as effective strategies for improving recruitment, career development, and retention of nurses in hospital care settings, it is worth noting that the literature reveals a significant gap in the adaptation of mentoring programs in developing countries. Specifically, the formal implementation of mentoring programs for hospital nurses in Uganda is rarely reported. Consequently, the aim, objectives, and significance of the present study are outlined. The subsequent chapters will present a thorough literature review, a detailed exploration of the theoretical framework, a comprehensive description of the methodology and methods employed in the study, the results obtained, and a comprehensive discussion of the findings.

CHAPTER 2: LITERATURE REVIEWS

This chapter contains extracts from:

Kakyo, T. A., Xiao, L. D., & Chamberlain, D. (2022). Benefits and challenges for hospital nurses engaged in formal mentoring programs: A systematic integrated review. *International nursing review*, 69(2), 229-238. <https://doi.org/10.1111/inr.12730>

2.1 Chapter introduction

This chapter presents methods and findings from the review of international literature on mentoring for recruitment, retention and career development of nurses working in clinical practice. The literature review was systematically done to help the researcher situate the phenomenon into a particular context as well as in identifying what is known and the unknown (Munn et al., 2019). In the first part of this chapter the methods and results of the systematic review of literature regarding mentoring for nurses working in the hospitals is presented. The second part (see Chapter 3) presents the findings from the updated literature search of primary research articles published after the initial integrated review had been published.

2.2 Review methods

Aim

The aim of the systematic review is to explore the overall benefits and challenges for the mentee, the mentor, and the hospital (stakeholders) in hospital sponsored mentoring programs for nurses. The review questions were:

1. What are the benefits of mentoring programs for stakeholders in hospital settings?
2. What are the challenges faced by stakeholders in mentoring programs in hospital settings?

Design

The review was a systematic integrated review that used a convergent synthesis design as described by Chen and colleagues (2020). The design allowed the reviewers to analyse qualitative, quantitative and mixed methods studies to widen an understanding of formal mentoring programs with benefits and challenges. A convergent synthesis involves transforming quantitative findings and quantitative results of mixed methods studies into

qualitative codes (Hong et al., 2017). Thematic synthesis was used to inductively build codes from all studies into subthemes and themes (Nowell et al., 2017). Prior to commencing the search, the review protocol was published with Prospero Registration number CRD42020185704.

Search methods

The first author together with the assistance of the librarian searched six databases: CINAHL, Web of Science, MEDLINE, Scopus, Science Direct and ProQuest. There were no time restrictions applied to the search. The search was initially conducted on June 12, 2020 and updated on September 16, 2020. The following search terms were used: nurse, practical nurses, hospital, acute care settings, acute care facilities, mentorship, mentoring, mentor, preceptorship, precept, retention, intention to stay, turnover, personnel retention and career development (Appendix 1). Reference lists of articles that met the inclusion criteria were manually searched. Original studies published in English that used quantitative, qualitative or mixed methods research designs were included in the review. Studies were included if they focused on mentoring programs for nurses working in acute care settings. The review excluded studies that focused on mentoring programs for students and mentoring in aged care or residential care settings. Moreover, we only synthesised findings from peer reviewed original studies that reported mentoring programs. Reviews, reports, pilot studies, editorials, and commentaries were excluded. Details of the inclusion criteria are shown in Table 2.1.

Table 2.1 Showing the eligibility criteria.

	Inclusion criteria	Exclusion criteria
Population	Nurses	Nursing students
Intervention	Mentoring programs	Preceptorship without additional mentorship, Orientation programs, graduate programs, residency programs
Context	Acute care facilities, clinical settings, hospitals	Long-term care facilities, education institutions, residential care settings
Outcome	Recruitment, retention, and career development	Improved patient care, NCLEX pass rates
Study design	Qualitative, quantitative, and mixed methods design	Any type of reviews, pilot studies, reports, editorials, and commentaries

Search outcomes

The initial search resulted in 3961 articles. Upon the removal of 1153 duplicates, the resultant 2808 records went through title and abstract screening by all three authors. Full text screening was undertaken for 269 articles. Each article was screened by two authors. Any arising disputes were resolved during review meetings. The reference lists of the selected articles were manually scanned, retrieving a further three articles. Finally, 23 articles were selected for the systematic review. Nine of these articles were qualitative studies, 13 were quantitative studies and one was a mixed methods study (Figure 2.1). The screening was performed in Veritas Health Innovation (2017) Covidence software.

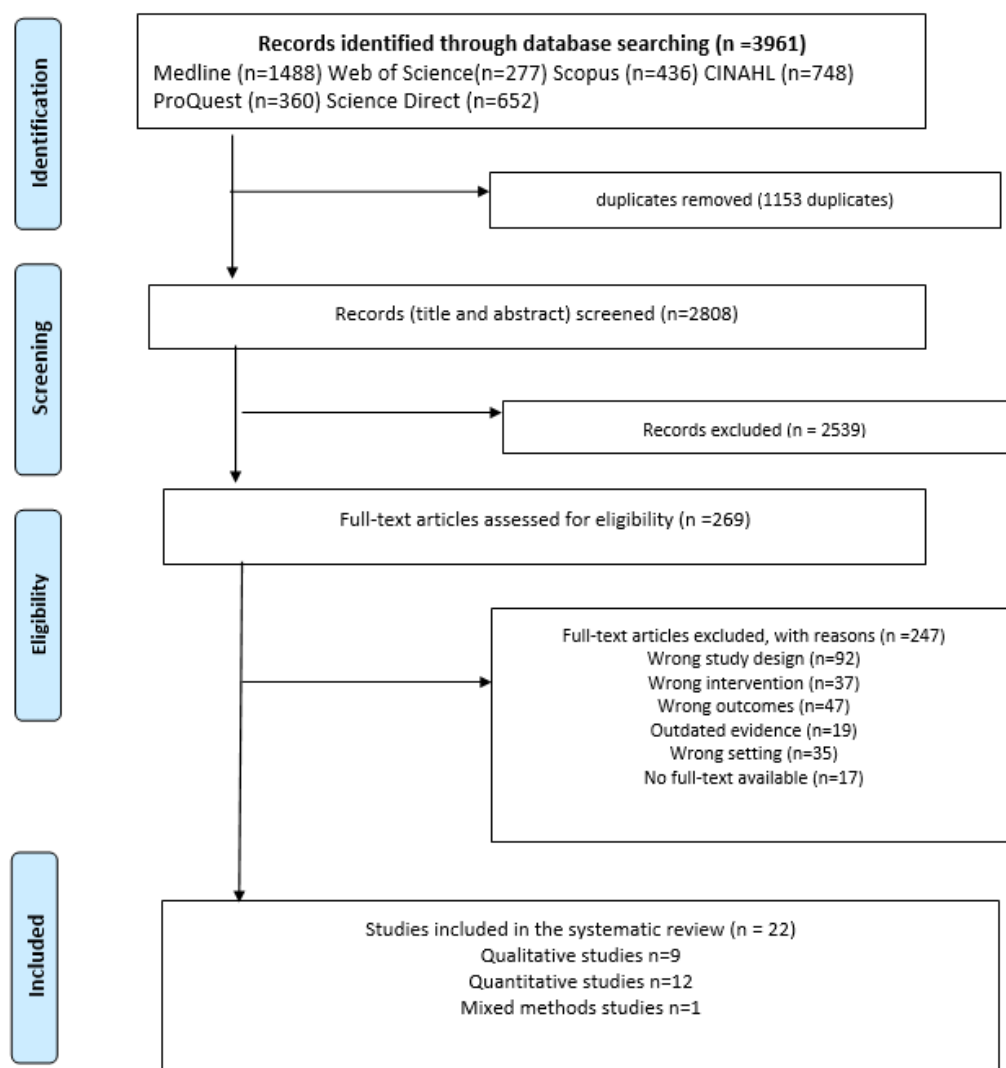


Figure 2.1 Prisma flow diagram showing the study selection.

Quality appraisal

The 23 articles that met the inclusion criteria were assessed for methodological quality using Joanna Briggs Institute's quality appraisal tools: checklist for analytical cross-sectional studies, quasi experimental studies and qualitative studies (JBI 2020). Each article was independently appraised by two authors and disagreements regarding quality were resolved during review meetings. Only one quantitative study was excluded at this stage of the review due to inappropriate statistical analyses used in the study. The quality rating of 22 studies ranged from moderate to good based on the JBI manual (Appendix 2).

Data abstraction

Data was exported from Covidence (Veritas Health Innovation, 2017) to Endnote software. Data extracted by the first author was verified by the second and third authors. Author names, study aims, study design, participant demographics and results were extracted from the articles and entered into a table (Table 2.2, appendix 3). Disagreements were resolved through discussion during review meetings.

Synthesis

Thematic synthesis was used to consolidate review findings (Nowell et al. 2017) using NVivo software (QSR International Pty Ltd, 2020). Findings of quantitative, mixed methods and qualitative studies were read line by line to identify initial concepts or codes. The final stage of coding resulted in five analytical themes (appendix 4 and 5). Due to the high heterogeneity, different study designs and sampling methods in the quantitative studies a meta-analysis was not performed.

Table 2.2 Brief summary of included studies

	Author, Year, county of origin	Summary of included articles (full description is available in appendix 3)
1.	Adeniran et al. (2013), USA	A cross-sectional study to determine differences between Internationally Educated Nurses (IEN) and US Educated Nurses (UEN) in their levels of mentoring functions and self-efficacy as well as participation in professional development and career advancement. Results showed that there was a significant difference between groups for role modelling function of mentoring but no significant difference between groups for the mentoring functions of career development and psychosocial support.
2.	Angelini (1995), USA	A study using Grounded theory to develop a model that depicts mentoring and emergent variables. Findings revealed structural and process models showing that mentoring was influenced by environment, people and events occurring in the hospital settings.
3.	Devey et al (2020), Canada	A qualitative interpretive descriptive study to explore mentorship pairing practices occurring between new graduate nurses and more experienced nurses in a mentoring relationship within clinical setting. Findings showed opportunities created by pairing and barriers to the mentor-mentee pairing process.
4.	Fleig-Palmer et al. (2015), USA	A survey to examine the impact of interpersonal mentoring on affective organisational commitment and the potential moderating effect of affective commitment in the knowledge transfer-retention relationship. Interpersonal mentoring explained 35% of the variance in affective commitment.
5.	Huang et al. (2012), Taiwan	A survey to examine the effects of interpersonal attraction, self-efficacy and transformational leadership on Relationship effectiveness, to test mentoring function as a mediator of relationship effectiveness, and to verify the effect of Relationship effectiveness on protégé organisational commitment. The perceived relationship effectiveness between the mentor and mentee had effect on mentee's organisational commitment.
6.	Jakubik, (2008), USA	A descriptive correlational study to explore the relationships among quality, quantity, and type of mentoring and mentoring benefits for Pediatric staff nurse protégés. Quality of mentoring explained 54.76% of the variance in the mentoring benefits.
7.	Jakubik et al. (2011), USA	A descriptive, correlational study to explore the predictors of mentoring benefits among experienced pediatric staff nurse protégés in a single freestanding Midwestern children's hospital. Quality of mentoring was significant, explaining 37.21% of the variance in mentoring benefits.
8.	Latham et al. (2011), USA	A quasi-experimental, non-control group mixed methods design to evaluate the effect of university-service partnership mentorship and shared governance program on retention and vacancy rates. One of the hospitals improved their registered nurse retention rate over the 3-year period of the mentorship program.

9.	Mariani, (2012), USA	A descriptive comparative and correlational study to explore the influence of participation in a mentoring relationship on career satisfaction and on intent to stay in nursing, and the relationship between career satisfaction and intent to stay in nursing. There was no significant difference for intention to stay in nursing between the mentored and the non-mentored groups.
10.	Merga et al (2020), Australia	A study using grounded theory to examine nurse managers' perceptions of barriers to the mentoring of early career nurses. Three themes represented the barriers to mentoring of early career nurses.
11.	Pham et al. (2019), Taiwan	A cross-sectional design to examine the impacts of mentor–mentee rapport on willingness to mentor/be mentored, self-efficacy, outcome expectations, career interest and subsequently on nurses' professional turnover intention. Results showed the importance of rapport between the mentor and mentee in retaining nurses.
12.	Pop (2017), USA	A study using grounded theory to develop a theory of mentoring for new Nurse Practitioners in a hospital setting. A three-phase theory of mentoring emerged from the data
13.	Rohatinsky et al (2016), Canada	A qualitative study to explore employee perceptions of mentorship in rural healthcare organisations. Findings showed role of the organisation, the rural community, and mentoring programs in the transition of early career nurses as well as the benefits and challenges of mentoring.
14.	Rohatinsky et al (2018), Canada	A qualitative study to determine the factors and practices that influence the development and sustainability of mentoring relationships in rural healthcare settings. The findings elaborated on the challenges and facilitators of mentorship.
15.	Ronsten et al (2005), Sweden	The study employed qualitative methods to elucidate mentorship of recently registered nurses. The study employed the Sympathy-Acceptance-Understanding-Competence (SAUC) model for confirming mentorship. Findings explained several benefits of mentoring for the mentees.
16.	Schroyer et al. (2020), USA	A quasi-experimental study to calculate retention rates before and after implementation of a mentorship program. Nurses assigned a mentor are retained at a higher rate.
17.	Weese et al. (2015), USA	A descriptive, correlational study to determine if mentoring practices predict mentoring benefits. There was a significant correlation between total mentoring practices and total mentoring benefits

18.	Weng et al. (2010), Taiwan	A quantitative survey to examine the effects of mentoring functions on the work outcomes of new nurses in Taiwan. The results showed that career development and role modelling functions of mentorship had significant positive impact on organisational commitment.
19.	Witter et al. (2013), USA	A quasi-experimental study to examine how novice medico-surgical registered nurses, with and without mentoring, differ for their pre- and post-mentoring scores of willingness to remain in the nursing profession. Significant differences between the two groups were found for willingness to remain in the nursing profession
20.	Woolnough et al (2006), UK	A qualitative study to understand the experiences of executive and non-executive UK National Health Service (NHS) Trust directors and senior managers as mentors in a mentoring programme for a cohort of 27 female mental health nurses. The study showed the benefits of mentoring program for the mentors.
21.	Woolnough et al (2014), UK	A longitudinal, qualitative study to investigate the effects of a mentoring programme on female mental health nurses' career and personal development compared to a matched comparison group. Themes arising from the data included career development and personal development outcomes of mentorship.
22.	Zhang et al. (2019), China	A longitudinal, non-randomized control study to examine the effects of one-on-one mentorship program on the turnover rate of nurses. For the matched pairs, the 1-year turnover rates of new graduate nurses in the experimental group was significantly lower than that of the control group.

2.3 Results

2.3.1 Characteristics of the studies

Country of research

Twenty-two studies were included in the review: qualitative studies (n=9), quantitative studies (n=12) and mixed methods design (n=1). The studies were undertaken in the USA (n=11), Canada (n=3), Taiwan (n=3), United Kingdom (n=2), Australia (n=1), Sweden (n=1) and China (n=1). The qualitative studies described the experiences of mentors and mentees (Angelini, 1995; Devey et al., 2020; Merga et al., 2020; Pop, 2017; Rohatinsky & Jahner, 2016; Rohatinsky et al., 2018; Ronsten et al., 2005; Woolnough et al., 2006; Woolnough & Fielden, 2014). Seven of the quantitative studies used a cross-sectional design to examine the relationship between mentoring activities and mentoring outcomes (Fleig-Palmer & Rathert, 2015; Huang & Weng, 2012; Jakubik, 2008; Jakubik et al., 2011; Pham et al., 2019; Weese et al., 2015; Weng et al., 2010).

Study designs

Four studies used a quasi-experimental design, (Latham et al., 2011; Schroyer et al., 2020; Witter & Manley, 2013; Zhang et al., 2019). They described mentoring programs that went for two to 12 months with a mentor-mentee ratio of one to one. Pairing of the mentor and mentee was according to mentee choice (Latham et al., 2011) or chosen by a third party such as a head of department or program coordinator (Schroyer et al., 2020). Most commonly the mentor was a nurse with more than five years of clinical experience who worked at the same hospital as the mentee (Latham et al., 2011; Ronsten et al., 2005; Schroyer et al., 2020; Witter & Manley, 2013; Zhang et al., 2019). Studies reported formal training, lasting four to eight hours, to improve mentors' competence (Latham et al., 2011; Witter & Manley, 2013; Zhang et al., 2019). In the programs, the mentee was a new graduate or a re-entry nurse with between 0-3 years clinical experience (Latham et al., 2011; Ronsten et al., 2005; Schroyer et al., 2020; Witter & Manley, 2013; Zhang et al., 2019).

The findings of the 22 studies were synthesised and five main themes were identified. The first three themes described as the benefits for mentees, the benefits for mentors, and the benefits for the hospital, address the review question about the benefits of mentoring programs. The last two

themes named as challenges perceived by mentees and mentors and mismatched mentor-mentee pairs, answer the review question about challenges in mentoring programs.

Participants

The age of the participants was not reported in two studies (Rohatinsky & Jahner, 2016; Woolnough et al., 2006) while in seven studies age was reported as a categorical value (Devey et al., 2020; Fleig-Palmer & Rathert, 2015; Merga et al., 2020; Pham et al., 2019; Pop, 2017; Rohatinsky et al., 2018; Weese et al., 2015). In the rest of the 13 articles, age was reported as a mean value (Adeniran et al., 2013; Angelini, 1995; Huang & Weng, 2012; Jakubik, 2008; Jakubik et al., 2011; Latham et al., 2011; Mariani, 2012; Ronsten et al., 2005; Schroyer et al., 2020; Weng et al., 2010; Witter & Manley, 2013; Woolnough & Fielden, 2014; Zhang et al., 2019). All in all the age of the participants ranged between 19 and 74 years.

Three studies did not report about the gender of the participants (Huang & Weng, 2012; Latham et al., 2011; Rohatinsky & Jahner, 2016). In the rest of the articles most of the participants were females (Adeniran et al., 2013; Angelini, 1995; Devey et al., 2020; Fleig-Palmer & Rathert, 2015; Mariani, 2012; Merga et al., 2020; Pham et al., 2019; Pop, 2017; Rohatinsky et al., 2018; Ronsten et al., 2005; Schroyer et al., 2020; Weese et al., 2015; Weng et al., 2010; Witter & Manley, 2013; Woolnough et al., 2006; Woolnough & Fielden, 2014; Zhang et al., 2019). Details are shown in appendix 3.

Interventions

In six studies, the mentoring program as an intervention was explicitly described. In each of these studies, a consistent pattern emerged, with mentors boasting greater clinical experience compared to their respective mentees. The program was designed to either support a newly graduating nurses, nurses transitioning to a new unit, nurses returning to practice (Latham et al., 2011; Schroyer et al., 2020; Zhang et al., 2019), or the overall goal was towards career development (Woolnough et al., 2006; Woolnough & Fielden, 2014). The program was designed in collaboration with a university (Latham et al., 2011; Woolnough & Fielden, 2014) or adapted from existing program (Schroyer et al., 2020) or an addition to existing preceptorship program (Zhang et al., 2019) or a completely unique program (Witter & Manley, 2013; Woolnough et al., 2006). The mentoring program was offered for a period between one and three years. Training was offered to both mentor

and mentee (Latham et al., 2011; Schroyer et al., 2020; Woolnough et al., 2006; Woolnough & Fielden, 2014) or to only the mentor (Witter & Manley, 2013; Zhang et al., 2019). The mentor-mentee pairing process, a critical aspect of mentoring, varied across the studies. For instance, in one study, mentees were granted autonomy in selecting their mentors (Latham et al., 2011) whereas in others, third-party entities facilitated the pairing process (Schroyer et al., 2020; Witter & Manley, 2013; Woolnough & Fielden, 2014; Zhang et al., 2019). Notably, one study did not explicitly outline the specifics of the matching procedure (Woolnough et al., 2006). The role of the organisation manifested in various forms. Some studies support was shown through program coordination efforts (Schroyer et al., 2020; Woolnough & Fielden, 2014) while others stressed the significance of regular meetings and interactive sessions between the mentoring dyad and executive management (Latham et al., 2011; Zhang et al., 2019).

Out of the total studies reviewed, the majority (n=16) adopted a cross-sectional approach to examining the concept and phenomenon of mentoring. Firstly, these studies explored individuals' experiences as they relate to their mentoring relationships (Angelini, 1995; Devey et al., 2020; Merga et al., 2020; Pop, 2017; Rohatinsky & Jahner, 2016; Rohatinsky et al., 2018; Ronsten et al., 2005). Some studies focused on mentoring characteristics, such as prior experience with mentoring and willingness to participate in mentoring programs (Adeniran et al., 2013; Mariani, 2012; Pham et al., 2019). Notably, one study specifically investigated mentor characteristics, including factors such as gender, ethnicity, and occupational position. Additionally, six studies explored the mentoring functions as perceived and experienced by nurses (Adeniran et al., 2013; Fleig-Palmer & Rathert, 2015; Huang & Weng, 2012; Jakubik, 2008; Jakubik et al., 2011; Weese et al., 2015; Weng et al., 2010). These functions encompassed areas such as career development, psychosocial support, role modelling, counselling, protection, acceptance, and friendship, among others.

Outcomes in the studies

The studies included in this analysis investigated the impact of mentoring on a range of outcomes. These outcomes encompassed career growth (Adeniran et al., 2013), career satisfaction (Mariani, 2012), professional development (Adeniran et al., 2013), organisational commitment (Fleig-Palmer & Rathert, 2015; Huang & Weng, 2012; Weng et al., 2010), retention rates (Fleig-Palmer & Rathert, 2015; Latham et al., 2011; Schroyer et al., 2020), intentions to stay in the organisation (Mariani, 2012; Pham et al., 2019; Zhang et al., 2019), and intentions to stay in the profession

(Witter & Manley, 2013). Furthermore, several studies employed structured questionnaires (Jakubik, 2008; Jakubik et al., 2011; Weese et al., 2015) or utilized diverse qualitative methods to examine the broader benefits of mentoring. Details are shown in appendix 3.

2.3.2 mixed methods findings of the review

2.3.2.1 Synthesised integrated finding 1: The benefits for mentees.

Eight reviewed studies (Angelini, 1995; Jakubik, 2008; Jakubik et al., 2011; Latham et al., 2011; Pop, 2017; Ronsten et al., 2005; Weese et al., 2015; Woolnough & Fielden, 2014; Zhang et al., 2019) reported that mentoring programs had a variety of benefits for mentees. In the studies conducted in paediatric care settings, the mentees' perceived benefit from mentoring programs were significantly associated with the quality of their mentor's support (Jakubik, 2008; Jakubik et al., 2011; Weese et al., 2015). The support components measured included those that targeted self-efficacy development, for example enabling mentees to have mastery experiences via observing, coaching and problem-solving; acting as a role model; giving verbal encouragement via feedback; and supporting emotional stress. Improvements in self-efficacy were also narratively described by mentees *"I feel much more in control and less frustrated in my career. The programme's been a catalyst for me!"* (Woolnough & Fielden, 2014, p. 116).

Studies showed consistently across-time span and study sites that formal mentoring program improved mentees' overall practice at work (Angelini, 1995; Jakubik, 2008; Jakubik et al., 2011; Ronsten et al., 2005; Weese et al., 2015) and their ability to cope with work pressures (Jakubik, 2008; Jakubik et al., 2011; Pop, 2017; Ronsten et al., 2005; Woolnough & Fielden, 2014). Findings also revealed that mentoring programs assisted mentees to expand professional networks, socialise with colleagues (Ronsten et al., 2005; Woolnough & Fielden, 2014), developed leadership skills (Weese et al., 2015) and fast tracked their career (Pop, 2017; Weese et al., 2015). Mentees were satisfied with the social bond they had developed with their mentors (Angelini, 1995; Devey et al., 2020; Merga et al., 2020; Pop, 2017; Rohatinsky & Jahner, 2016). A social bond not only gave them a sense of belonging (Weese et al. 2015), but also a sense of security (Latham et al., 2011; Ronsten et al., 2005; Weese et al., 2015). Further, mentees perceived reciprocal relationships when the mentee and the mentor became friends (Pop, 2017). These findings highlighted the benefits mentees gained from mentoring programs.

2.3.2.2 Synthesised integrated finding 2: The benefits for mentors.

Mentoring junior nurses provided opportunities for mentors to develop and demonstrate leadership skills, which was an important step towards mentors' own career growth (Woolnough et al., 2006). Four studies described how the mentoring program enabled mentors to be more effective to lead junior nurses in practice (Angelini, 1995; Pop, 2017; Rohatinsky & Jahner, 2016; Woolnough et al., 2006). Mentoring programs also helped mentors to expand their network through connections with mentees and mentors in other departments (Angelini, 1995; Pop, 2017). This network expansion had a positive effect on their reputation and influence in the hospital which was crucial for their leadership development (Woolnough et al., 2006). Furthermore, when they taught less experienced nurses, they further developed their knowledge, skills and experience in practice areas (Pop, 2017; Woolnough et al., 2006), and they learnt from mentees (Rohatinsky & Jahner, 2016). The findings supported the reciprocal nature of relationships between mentees and mentors.

Through mentoring programs, mentors were also able to reflect on their own practice, which reinforced good practices and motivated them to update knowledge and outdated practices (Pop, 2017). Mentors also perceived that participation in the program had a positive effect on their job satisfaction (Woolnough et al., 2006). These examples further supported the importance of reciprocity in mentoring programs.

2.3.2.3 Synthesised integrated finding 3: The benefits for the hospital.

Establishing mentoring programs in hospitals was subjectively considered crucial in attracting and retaining novices (Rohatinsky & Jahner, 2016). A mentoring program was perceived as an attraction for job seekers (Rohatinsky et al., 2018). From the qualitative findings, mentees perceived that the mentor influenced their decision to stay at their organisation (Rohatinsky & Jahner, 2016). Furthermore, mentees perceived that the positive work environment created by the mentor resulted in more team cohesion, a key condition for high-quality patient care (Rohatinsky & Jahner, 2016). These examples indicated that organisation's supporting for mentors, for example through education, training, protected time for mentor to engage mentees in the program were prerequisite for organisations to gain substantial benefits from mentoring programs.

The quantitative studies showed that there was a significant difference in retention rates (Schroyer et al., 2020; Zhang et al., 2019) and intentions to stay in nursing (Witter & Manley, 2013) between mentored and non-mentored nurses, further supporting that mentoring program had benefits for

the organisations. In the pre-test post-test study by Latham et al (2011), retention rates improved over the three years that a mentoring program was offered. Although, in another study the difference between groups was not significant (Mariani, 2012) most likely due to the unmatched sampling for the mentored and non-mentored groups. Furthermore, the level of organisational support for mentoring programs might have a role to play regarding the reported differences in retention rates. For example, in the study by Fleig-Palmer and Rathert (2015) perceived high-level interpersonal mentoring by nurses via organisational support was positively associated with their affective commitment. A similar finding was reported in a study conducted in Taiwan (Huang & Weng, 2012). When examining the relationship between mentoring and organisational commitment, Weng and colleagues found that only career development and role modelling activities, rather than psychosocial support, had significant impact on mentees' affective commitment to the organisation (Weng et al. 2010). These findings supported the reciprocal relationships between the organisation and the mentees.

Mentoring programs were perceived as having positive impacts on patient care. For example, *"increases the amount of empowered, respected, independent RNs" and "improves patient care and safety"* (Latham et al., 2011, p. 350). Moreover, mentoring programs improved patient care via increased nurse autonomy: *"Because I've been promoted I've been able to make changes that affect patient care that I've wanted to for a long time but didn't have the authority to do"* (Woolnough & Fielden, 2014, p. 117). An organisation's support, for example providing training opportunities for mentors in how to effectively mentor, resolve conflicts and handle diverse personalities effectively in the workplace, had benefits for the mentees, mentors and the organisation (Angelini, 1995; Latham et al., 2011; Merga et al., 2020). Through this, reciprocity between the organisation and the mentors/mentees was demonstrated.

2.3.2.4 Synthesised integrated finding 4: Challenges perceived by mentees and mentors.

Five qualitative studies (Merga et al., 2020; Rohatinsky & Jahner, 2016; Rohatinsky et al., 2018; Ronsten et al., 2005) and one mixed methods study (Latham et al., 2011) described the lack of protected time provided by the organisation to support mentoring activities for mentees and mentors (Merga et al., 2020). Furthermore, participants wanted effective administrative oversight of mentoring resources and mentoring relationships (Latham et al., 2011). Limited training and information regarding the mentoring process (Merga et al., 2020; Rohatinsky & Jahner, 2016) and

limited rewards for mentors (Merga et al., 2020) affected the success of programs. Lack of incentives was also a challenge (Angelini, 1995; Merga et al., 2020; Rohatinsky et al., 2018). Furthermore, in one study the mentees reported hospital management to be unapproachable (Latham et al., 2011). When there was limited support for mentoring activities, a high turnover of mentees, especially in rural hospitals, can be experienced (Rohatinsky et al., 2018).

Unmet needs to connect with local people was mentioned by rural mentees desiring to socialise with others in their new local community : “*You don’t know anyone, and everyone else knows you’re the new nurse in town, that can get a bit intimidating too*” (Rohatinsky & Jahner, 2016, p. 4). This example indicated that a lack of organisational support for mentoring programs had a negative impact on mentees. To realise the mutual benefits of mentoring, an organisation’s contribution towards instituting and supporting the running of the mentoring programs was essential to supporting the reciprocity.

2.3.2.5 Synthesised integrated finding 5: Mismatched mentor-mentee pairs.

Interpersonal issues between the mentor and mentee were highlighted in some studies. For example, perceived similarity between the mentor and mentee affected the effectiveness of the relationship (Huang & Weng, 2012) indicating that mismatched mentor-mentee dyads affected program outcomes (Rohatinsky & Jahner, 2016). Dyads could be mismatched because of differences in personality, temperament, age and/or qualifications. Although, similarity of personality and learning styles between mentor and mentee pairs was not significant, however the authors did not examine its impact on the effectiveness of the relationship (Latham et al., 2011). Comparatively, differences in personality were a main factor affecting development of reciprocal relationships between mentees and mentors (Merga et al., 2020). Furthermore, any incompatibility in temperament could be worsened by generational differences between the mentor and mentee (Merga et al., 2020).

One study acknowledged that the inability to establish a respectful professional relationship affected the effectiveness of a mentoring relationship (Rohatinsky et al., 2018). In addition, sometimes mentees had a disrespectful attitude towards mentors with lower formal qualifications (Merga et al., 2020). This affected the requirements for a reciprocal relationship in which the mentee is receptive, the mentor is willing to offer support, and both are respectful throughout their interactions.

These findings showed that mismatched mentee and mentor pairs had a negative impact on developing ongoing reciprocal relationships. Mitigating the matching issues required considerable organisational support, taking into account personalities, age, level of work experience and education level (Rohatinsky & Jahner, 2016). Other studies recommended mentee involvement in the selection process and providing an orientation program to allow the partners to acquaint themselves (Latham et al., 2011; Rohatinsky & Jahner, 2016; Rohatinsky et al., 2018).

2.4 Discussion

The aim of this systematic review was to explore the overall benefits and challenges arising from hospital mentoring programs for nurses. Findings supported that formal mentoring programs for hospital nurses showed reciprocity for all stakeholders involved in the program. Support from the hospital and carefully designed programs that meet the mentee's career development goals, learning needs and expectations of the mentor foster benefits for all. In the discussion below, the findings are related to relevant studies and theories to enhance understandings of not only conditions for fostering an effective mentoring program, but also the mechanisms through which identified challenges affect the program.

Findings from this review confirm that reciprocity between the mentees and the mentors is a condition for achieving positive outcomes for the mentees and the mentors. The findings support a social exchange theory by Blau (1964) that time spent on meaningful interactions for individuals involved in supporting relationships (i.e. mentoring relationships) is a key indicator of developing social bonds and trust relationships (Ragins, 2016). Inability of the organisation to provide protected time compromises the ability of the mentor and mentee to develop bonds and trust. Trust is the basis of a social exchange relationship (Blau, 1964) any factors that affect the development of trust also affect outcomes of the mentoring relationship (Ragins, 2016). One of the challenges identified in this review was interpersonal differences. These interpersonal challenges have been reported in literature as affecting other aspects of mentoring and practice at large (Fernandez et al., 2018; Frederick, 2014). Strategies to address these challenges have centred on matching the dyad based on their individual characteristics (Zhang et al., 2016) since similarity between the dyad is responsible for the benefits of mentoring relationships (Ragins, 2016). An alternative strategy is to improve mentee and mentor resilience and ability to solve conflicts. There is need to broaden the

content of training to include soft interpersonal skills that are vital for reciprocal relationships and skills to resolve generational differences and interprofessional conflict. Preparation that mentors receive for their role is an enabler for the mentoring program (Thornton, 2014).

Findings also support reciprocity between the organisation and the mentees/mentors as a condition for effective mentoring programs. When an organisation has made efforts via rewards, resources, education or structural changes to improve employees' wellbeing, the employees develop a sense of belonging to the organisation or so-called organisational affective commitment with which the employees are willing to do extra work for the organisation (Astuty & Udin, 2020; Eisenberger et al., 1986). Mentees' perceived organisational support includes direct support from the organisation, for example protected time and education and training resources available, and indirect organisational support through their mentors (Park et al., 2016). Mentors' affective commitment to the organisation is demonstrated by their willingness to invest their time to support the mentees beyond usual work hours (Ronsten et al., 2005, p. 316). Although the relationship between organisational support and staff affective commitment has been widely studied in regard to workforce retention, fewer studies have explored the relationship in mentoring programs for hospital nurses.

Staff turnover often remained a challenge despite the establishment of mentoring programs as shown in this review. This situation was especially visible in rural locations (Rohatinsky et al., 2018). Rural facilities have fewer resources to support mentoring programs (Efendi et al., 2019). Furthermore, the extended scope of practice for nurses due to staff shortages in rural hospitals (Feringa et al., 2018) is often perceived as increased workload, hence affecting mentees' commitment to stay working for rural hospitals. Studies that explore the influence of these policy factors are scarce but are much needed.

Most supporting components provided by mentors reported in the studies reviewed are observation, coaching, feedback, role modelling, persuasion and encouragement (Jakubik, 2008). This review identified that the quality of mentors' support to mentees was a single predictor of mentees' perceived benefits of the mentoring program (Jakubik, 2008; Jakubik et al., 2011; Weese et al., 2015). Mentor and mentee interactions require protected time for them in a busy clinical environment. However, time constraints were identified as a barrier (Merga et al., 2020).

The findings support a previous study that heavy workloads in a hospital setting affected nurses' commitment to support their peers (Oluchina & Gitonga, 2016). Although the concept of protected time has been used in training the health workforce (Denton et al., 2015), its implementation in hospital care settings is affected by a lack of policy interventions (Clark & Casey, 2016) and by understaffing (Brooke & Mallion, 2016).

Limitations

This systematic review has limitations. First, the reviewers were unable to perform a metanalysis to measure pooled effects of mentoring programs due to the lack of randomised controlled trials in the studies reviewed. Second, some of the themes, for example the benefits of mentoring programs for the mentor, were mainly supported by qualitative studies. There is need for quantitative studies to explore the magnitude of the impact of mentoring programs on mentors. Third, only two studies in this review focused on rural hospitals and no studies were from a developing country. Therefore, findings from this review may not reflect the benefits and challenges in developing countries.

2.5 Gap in literature

The review underscores the benefits of mentoring programs for mentors, mentees, and organisations, while acknowledging the potential challenges that can impact program outcomes. However, it is noteworthy that none of the studies examined were conducted in a developing country with a similar context to Uganda. The workforce challenges that mentoring programs aim to address are particularly severe in the developed world. For instance, the African region, including Uganda, faces a critical shortage of hospital nurses, with a nurse-to-patient ratio of 0.648 per 1,000 compared to 13.2 per 1,000 in Australia (The National health Workforce Accounts database, 2022; World Health Organisation, 2017). In such resource-constrained work environments, nurses struggle to prioritise care activities, potentially leading to differing perspectives on the benefits of mentoring compared to nurses in developed countries.

One notable gap in the literature is the lack of characterization of mentoring experiences. Typically, mentoring experiences are founded on traditional principles encompassing career development, psychosocial support, and role modelling functions (Jacobs, 2018). However, additional studies have demonstrated that the effectiveness of mentoring heavily relies on the

quality of the relationship between the mentee and mentor, emphasizing the need to evaluate the relational aspects of mentoring programs. While the majority of mentoring experiences are positive for both mentees and mentors, negative relationships have also been identified. These negative experiences encompass feelings of sabotage, jealousy, encounters with exploitative individuals, and an overall unsatisfactory experience (Huang & Weng, 2017). Furthermore, mentors may perceive mentoring as a waste of their valuable time (Lee et al., 2019) while mentees may perceive mentors as lacking the necessary competences to effectively mentor them (Cheong et al., 2020).

Considering the significant impact of the quality of the mentoring experience on outcomes, it is imperative to explore the experiences and outcomes of mentoring within the specific context of Uganda. Understanding how these factors influence assimilation into practice and retention is vital for developing tailored and effective mentoring interventions in the country.

2.6 Chapter summary

This review synthesised findings on the benefits and challenges for hospital nurses engaged in formal mentoring programs. The findings demonstrate that mentoring programs have overall benefits for the mentor, mentee, and hospital when reciprocal relationships are established. Outcomes from mentoring programs rely on structures, resources, quality of support and engagement. A lack of organisational support through insufficient protected time and mismatching of the mentee and mentor pair poses challenges for stakeholders.

CHAPTER 3: UPDATED LITERATURE SEARCH

3.1 Chapter introduction

The following sections present the findings from a recent update in the literature search. The rationale of updating the literature review was that the previous literature review, as reported in the previous chapter, was conducted three years ago. An updated search to gather the most current evidence on mentoring that nurses engaged with would inform the discussion on the gap in the study field and generate implications for nursing practice. This update aims to provide the latest insights and advancements in the field of mentoring for recruitment, retention, and career development of nurses in acute care settings, addressing any gaps that may have emerged since the initial review was conducted.

3.2 Summary of the review methods

There is continuous development of new evidence in mentoring literature as well as advancements in methodologies that impact the synthesis of findings. The aim of this updated systematic review was to explore the overall benefits and challenges for the mentee, the mentor and the hospital (stakeholders) in hospital sponsored mentoring programs for nurses. To ensure comprehensive coverage, six prominent databases, namely CINAHL, Web of Science, MEDLINE, Scopus, Science Direct, and ProQuest, were searched again in June 2023. The search strategy employed remained consistent with the methodology outlined Chapter 2, Section 2.2. The findings in the previous literature review were synthesised using guidelines from Hong et al. (2017); these have been improved to reflect the new research in mixed methods reviews, as shown in the new Joanna Briggs Institute (JBI) manual for evidence synthesis (Aromataris & Munn, 2021).

3.3 Results

3.3.1 Study Inclusion

Since completing the literature search for the integrated systematic review in 2020 (Kakyo et al., 2021), a total of 2197 articles were identified. Duplicates equating to 306 were removed, leaving 1891 articles for title and abstract screening. Of these, 1789 were considered irrelevant, leaving

102 articles to undergo full-text review. At this stage, 81 articles were considered irrelevant for various reasons: (i) the intervention used in the studies were irrelevant for this review (46 articles), (ii) the outcomes were not related to recruitment, retention of career, and professional development (14 articles), (iii) the studies were not primary research (12 articles), (iv) the studies did not have nurses as their population of interest (9 articles), and (v) the study was carried out in a nursing home, i.e., the type of setting was not relevant to this review (1 article). The remaining 19 articles were eligible for inclusion in the review. However, three of these articles were excluded since they had made part of the review presented in part one; this was done to prevent duplication of findings. One article was identified from a search of the reference list of the included articles. Eventually, 17 articles representing 16 studies were included in the review and underwent a critical appraisal process to determine their methodological quality. It is important to note that findings from one study were reported in two separate articles. Appendix 6 shows a list of studies included in the review.

3.3.2 Methodological quality

Quasi-experimental studies

Seven studies used quasi-experimental design (Appendix 7). Two studies reported in three articles (Coyne et al., 2020; Moss, 2022; Moss & Zukowsky, 2022) scored eight out of the possible nine on the critical appraisal tool. The study by Drury et al. (2022) scored a total of seven since the researchers did not report on the reliability of the tools used to measure the outcomes of the study. The rest of the studies (Bullock et al., 2022; Gayrama-Borines & Coffman, 2021; Krofft & Stuart, 2021; Mijares & Radovich, 2020) had scores ranging between three and five. The four studies used quality improvement and evidence-based practice principles to implement and evaluate outcomes of mentoring programs. They were therefore included in the review despite the low score on the critical appraisal.

Cross-sectional studies

As shown in table 1 (Appendix 7), four studies were appraised using the critical appraisal for analytical cross-sectional studies. Three of these studies (Choi & Yu, 2022; Gong & Li, 2019; Gong et al., 2022) had the full score of eight. The one study by Horner (2020), had a score of 5 due to three reasons. Firstly, the study under consideration lacked clarity regarding the validity

and reliability of the measures employed to measure mentoring (Q3). Furthermore, the study did not explicitly identify and treat confounding variables. This study being descriptive, these two items were considered not relevant for their study hence Horner's study was included in this review.

Qualitative studies

The qualitative components of the mixed methods studies were appraised using the JBI critical appraisal instrument (Coyne et al., 2020; Drury et al., 2022; Gayrama-Borines & Coffman, 2021; Horner, 2020; Moss, 2022). The scores of these five articles ranged between 3 and 4 given the authors did not clearly delineate the qualitative methodology adopted for their studies (Q3-Q5). Despite this limitation, these studies were deemed valuable for the review as they reported quantitative results that contributed significantly to the overall analysis. Five studies (Austin & Halpin, 2021; Coventry & Hays, 2021; Jangland et al., 2021; Kramer et al., 2021; Rohatinsky et al., 2020) that used purely qualitative methodologies had scores ranging between seven and nine as shown in Table 3 (see Appendix 7).

3.3.3 Description of the studies

The brief summary of the articles reviewed is presented in Appendix 6. The detailed information in each section in the table is showed in the following sections.

Country of research

Majority (n=9) of the studies (reported in ten articles) were conducted in the USA (Bullock et al., 2022; Coyne et al., 2020; Drury et al., 2022; Gayrama-Borines & Coffman, 2021; Horner, 2020; Kramer et al., 2021; Krofft & Stuart, 2021; Mijares & Radovich, 2020; Moss, 2022; Moss & Zukowsky, 2022). The rest of the studies were carried out in the Australia (Coventry & Hays, 2021), Canada (Rohatinsky et al., 2020), China (Gong & Li, 2019; Gong et al., 2022), Korea (Choi & Yu, 2022), Sweden (Jangland et al., 2021), and UK (Austin & Halpin, 2021).

Study designs

The 16 studies across 17 articles used a range of designs. Five articles used mixed methods, (Coyne et al., 2020; Drury et al., 2022; Gayrama-Borines & Coffman, 2021; Horner, 2020; Moss & Zukowsky, 2022). Of the five studies that used qualitative designs, three used a qualitative

descriptive design (Austin & Halpin, 2021; Coventry & Hays, 2021; Kramer et al., 2021), one study used a case-study design (Jangland et al., 2021) whilst one study carried out a qualitative evaluation of the mentoring program (Rohatinsky et al., 2020). Three studies used a cross-sectional design (Choi & Yu, 2022; Gong & Li, 2019; Gong et al., 2022) and the rest of the three quantitative studies were quality improvement projects that fit the quasi-experimental design description (Bullock et al., 2022; Krofft & Stuart, 2021; Mijares & Radovich, 2020).

Participants

All the participants were nurses. In all the studies that reported on the gender of the participants, majority were female nurses (Choi & Yu, 2022; Coventry & Hays, 2021; Coyne et al., 2020; Gong & Li, 2019; Gong et al., 2022; Jangland et al., 2021; Kramer et al., 2021; Rohatinsky et al., 2020). Nine studies did not report on gender as demographic variable (Austin & Halpin, 2021; Bullock et al., 2022; Drury et al., 2022; Gayrama-Borines & Coffman, 2021; Horner, 2020; Krofft & Stuart, 2021; Mijares & Radovich, 2020; Moss, 2022; Moss & Zukowsky, 2022).

Six articles did not report on the age of the participants (Austin & Halpin, 2021; Bullock et al., 2022; Gayrama-Borines & Coffman, 2021; Krofft & Stuart, 2021; Moss, 2022; Moss & Zukowsky, 2022). Four studies reported average age of the participants with the mean values ranging between 23.78 and 48 years (Coyne et al., 2020; Drury et al., 2022; Gong et al., 2022; Kramer et al., 2021). Seven studies reported age as a categorical variable (Choi & Yu, 2022; Coventry & Hays, 2021; Gong & Li, 2019; Horner, 2020; Jangland et al., 2021; Mijares & Radovich, 2020; Rohatinsky et al., 2020).

Interventions described in the studies.

Mentoring was the intervention of interest for this review. The studies included in this review assessed and evaluated mentoring as a program or concept. In four studies, mentoring was described as a concept, the mentor program was neither named nor described (Coventry & Hays, 2021; Gong & Li, 2019; Gong et al., 2022; Kramer et al., 2021). In one study, newly graduated nurses were allocated personal professional mentors (Austin & Halpin, 2021). The remaining ten studies across eleven articles named and described the mentoring program. The various programs mentioned were *Novice Nurse Support Group* (Coyne et al., 2020), *oncology nurse residency program* (Drury et al., 2022), *preceptorship* (Choi & Yu, 2022), *mentoring tool kit* (Moss, 2022;

Moss & Zukowsky, 2022), *Coaching Advancement to All Providers Using Leadership Tool* (Bullock et al., 2022), *head-heart-hand model* (Jangland et al., 2021), the Academy of Medical-Surgical Nurses mentoring program (Krofft & Stuart, 2021) and quality improvement mentoring projects (Gayrama-Borines & Coffman, 2021; Horner, 2020; Mijares & Radovich, 2020).

Findings from six studies were centred around original mentoring programs designed during these studies (Bullock et al., 2022; Coyne et al., 2020; Gayrama-Borines & Coffman, 2021; Horner, 2020; Jangland et al., 2021; Mijares & Radovich, 2020). In five studies reported across six articles, existing mentoring programs were adapted for the context in these study settings. For example, Moss (2022) and Moss and Zukowsky (2022), adapted the mentoring kit from the National Association of Neonatal Nurse Practitioners (NANNP), moreover Krofft and Stuart (2021) adapted the mentoring program from the Academy of Medical-Surgical Nurses (AMSN), whilst Rohatinsky et al. (2020) adapted a mentoring program designed for urban health care setting for the rural context. In two studies, mentoring was incorporated into existing residency (Drury et al., 2022) and preceptorship programs (Choi & Yu, 2022) respectively.

Three studies examined mentoring functions as perceived and experienced by the new graduates (Choi & Yu, 2022; Gong et al., 2022; Horner, 2020). In the study done in Korea, the researchers described three mentoring functions of career development, psychosocial support and role modelling functions. These were measured using a 23-item questionnaire adopted from previous studies measured on a 5-point Likert scale (Choi & Yu, 2022). The scale had a Cronbach's alpha of 0.96. In the study by Gong and colleagues, the three mentoring functions career guidance, psychosocial support and role modelling were measured using 9-items from an adapted scale measured on a 5-point Likert scale (Gong et al., 2022). The scale also had a Cronbach's alpha of 0.96. Gong and the colleague measured the *feedback environment established by mentor* on a 7-point Likert scale which they adapted for their study (Gong & Li, 2019). This scale had Cronbach's alpha of 0.93.

In the study by Horner (2020), the authors assessed various mentor characteristics which included: availability of a mentor, type of mentoring relationship, duration of the mentoring relationship, how the new graduate was matched with their mentor, the form of interactions during mentoring, desirable qualities in a mentor, willingness to serve as mentor, preference for e-mentoring, and benefits realised from the mentoring relationship (Horner, 2020).

Outcomes of the studies

Three outcomes were of importance to this review: recruitment, retention, and career development. In all 16 studies, mentoring was directed toward recruitment and/or support of novice nurses or new graduates. In one study (across two articles) mentoring support was designed for new advanced practitioner (Moss, 2022; Moss & Zukowsky, 2022). In another study mentoring was to support nurses new to the medical-surgical speciality (Krofft & Stuart, 2021) while Gayrama and colleagues focused on nurses transitioning into the emergency department (Gayrama-Borines & Coffman, 2021). In the quantitative studies including the quantitative part of the mixed methods studies, retention was measured in terms of job satisfaction (Coyne et al., 2020; Moss & Zukowsky, 2022), intentions to stay (Gayrama-Borines & Coffman, 2021; Krofft & Stuart, 2021; Moss & Zukowsky, 2022) and organisational commitment (Choi & Yu, 2022; Gong et al., 2022). Studies included in this review evaluated career development by assessing progression through the career ladder (Mijares & Radovich, 2020), self-efficacy (Choi & Yu, 2022), professional quality of life (Drury et al., 2022), and career adaptability (Gong & Li, 2019). Three quantitative studies (Bullock et al., 2022; Krofft & Stuart, 2021; Mijares & Radovich, 2020), three mixed methods studies (Gayrama-Borines & Coffman, 2021; Horner, 2020; Moss, 2022) and all the five qualitative studies (Austin & Halpin, 2021; Coventry & Hays, 2021; Jangland et al., 2021; Kramer et al., 2021; Rohatinsky et al., 2020) carried out an evaluation of mentoring programs and examined experiences and satisfaction with mentoring programs.

3.4 Findings of the review

3.4.1 Mentoring or mentoring programs described in the studies.

In ten studies, the mentoring program is described in varying levels of detail (Austin & Halpin, 2021; Bullock et al., 2022; Coyne et al., 2020; Drury et al., 2022; Gayrama-Borines & Coffman, 2021; Jangland et al., 2021; Krofft & Stuart, 2021; Mijares & Radovich, 2020; Moss, 2022; Rohatinsky et al., 2020). In all ten studies across 11 articles, mentoring was a one-on-one approach. The study by Jangland et al. (2021) explored group mentoring option in addition to one-to-one mentoring. Various theories underpinned these mentoring programs, which included Kramer's theory on new nurse specialisation (Coyne et al., 2020), Benner's theory on novice to

expert (Gayrama-Borines & Coffman, 2021), Meleis' transition theory (Moss, 2022), Jean Watson's human caring theory (Horner, 2020; Krofft & Stuart, 2021), Wagners's caring mentoring model (Mijares & Radovich, 2020), Cognitive career theory (Gong et al., 2022), and Head-Heart-Hand model (Jangland et al., 2021). Seven studies did not incorporate theories in their design, implementation and evaluation of the mentoring (Austin & Halpin, 2021; Bullock et al., 2022; Choi & Yu, 2022; Coventry & Hays, 2021; Drury et al., 2022; Kramer et al., 2021; Rohatinsky et al., 2020).

Making use of partnership in mentoring program design and implementation was observed in one study, where the healthcare organisation partnered with an academic institution (Bullock et al., 2022). Support for mentoring was provided through providing for coordination and training. A coordinator was available to manage the mentoring programs in ten studies (Austin & Halpin, 2021; Bullock et al., 2022; Coyne et al., 2020; Drury et al., 2022; Gayrama-Borines & Coffman, 2021; Jangland et al., 2021; Krofft & Stuart, 2021; Mijares & Radovich, 2020; Moss, 2022; Rohatinsky et al., 2020). Mentoring training was provided in seven studies (Bullock et al., 2022; Coyne et al., 2020; Drury et al., 2022; Jangland et al., 2021; Krofft & Stuart, 2021; Moss, 2022; Rohatinsky et al., 2020). Preparation for mentoring was done one-on-one in one study (Krofft & Stuart, 2021). For two studies training was virtual (Bullock et al., 2022; Rohatinsky et al., 2020) while in three studies training for the mentor and the mentee was provided face-to-face (Drury et al., 2022; Krofft & Stuart, 2021; Moss, 2022). The specific details of the training content varied, ranging from discussion about roles and responsibilities, mentoring meaning and processes, to receiving instructions about the scheduled mentoring activities. In two studies, authors indicate that training was provided but the details about the training content were not described (Coyne et al., 2020; Jangland et al., 2021).

In all the studies mentees were novice nurses who were new graduates (Bullock et al., 2022; Choi & Yu, 2022; Coventry & Hays, 2021; Coyne et al., 2020; Gayrama-Borines & Coffman, 2021; Gong & Li, 2019; Gong et al., 2022; Horner, 2020; Jangland et al., 2021; Kramer et al., 2021; Mijares & Radovich, 2020; Rohatinsky et al., 2020) starting work in a new speciality (Drury et al., 2022; Krofft & Stuart, 2021) or new to advanced practice (Moss, 2022). Mentors were experienced nurses. Mentor and mentees were matched by the coordinator (Austin & Halpin, 2021; Bullock et al., 2022; Drury et al., 2022; Gayrama-Borines & Coffman, 2021;

Krofft & Stuart, 2021; Moss, 2022; Rohatinsky et al., 2020). Matching was based on mentee preferences, dyad similarity and individual priorities. The duration of the mentoring programs ranged between 2 and 12 months with the dyad meeting either weekly or monthly. Rewards for mentoring are described in two studies. In the study by Krofft and Stuart (2021) mentoring others was incorporated in their annual evaluation while in the study by Jangland et al. (2021) mentors received protected mentoring time.

3.4.2 Effectiveness of mentoring

It is essential to emphasise that this review focused on examining the outcomes of mentoring in the context of recruitment, retention, and career development. The subsequent sections show the results of the synthesis of the findings from the studies, assessing the effectiveness of mentoring on these specific outcomes.

Retention

Implications of mentoring for retention were explored in three outcomes: intention to stay/leave, job satisfaction, and organisation commitment were common measures used in the studies.

Intentions to stay.

Some studies examined the effect of mentoring on intentions to stay working in the same organisation (Gayrama-Borines & Coffman, 2021; Krofft & Stuart, 2021; Moss & Zukowsky, 2022). Gayrama-Borines and Coffman (2021) assessed intentions-to-stay on the job for nurses transitioning (mentees) into the emergency department. They found that there was no significant difference between the before and after scores following implementation of a mentoring program (Gayrama-Borines & Coffman, 2021). The authors however did not report the exact scores. For the nurses newly hired to the medical-surgical ward, their mean intention-to-stay score after implementation of mentoring was 67.33 and the possible range of scores is 15-105; the higher the scores the greater the intentions to stay (Krofft & Stuart, 2021). The authors did not measure intention-to-stay prior to implementing the programs nor statistically interpret and relate the after scores to the mentoring phenomenon (Krofft & Stuart, 2021).

Moss and Zukowsky (2022) implemented the mentoring tool kit for neonatal advanced practice nurses and determined the number of nurses intending to stay following adaptation of the

program. Their study recruited two cohorts and examined both mentor (n=8) and mentee (n=10) groups. For mentees, the number of nurses intending to stay in the next one year reduced from 10 to 7 following implementation of the program while intentions to stay in the next 3 years reduced from 10 to 6 (Moss & Zukowsky, 2022). The number of mentors intending to stay in the next 1 year remained the same before and after the mentoring program while for intentions to stay at 3 years, the numbers reduced from 8 to 6 (Moss & Zukowsky, 2022).

Job satisfaction

Two studies examined the relationship between mentoring and job satisfaction. Moss and Zukowsky (2022) measured job satisfaction before and six months after implementation of mentoring while Coyne and colleagues measured job satisfaction at baseline and at 6 and 12 months during the implementation of mentoring (Coyne et al., 2020). Computed means scores show a decreasing trend in the mentee's levels of job satisfaction from baseline to six months (Coyne et al., 2020; Moss & Zukowsky, 2022). Moss and Zukowsky (2022) report on job satisfaction for mentors and results showed mean levels of job satisfaction decreasing for both cohorts included in their study. In both studies, the level of significance for the decrease in job satisfaction scores was not reported.

Organisation commitment

Two studies examined the relationship between mentoring function and organisation commitment using regression analysis. In the study by Choi and Yu (2022) in which authors examined preceptor's mentoring function and their effect on organisation commitment. They found the effect of mentoring on organisation commitment was significant ($B=0.38, p<0.001$). Gong et al. (2022) examined the effect of mentoring relationship on organisation commitment using mediation analysis. The direct relationship between mentoring and organisation commitment was significant ($B=0.49, p<0.001$) (Gong et al., 2022).

Career development

Four studies: one mixed methods (Drury et al., 2022) and three quantitative studies (Choi & Yu, 2022; Gong & Li, 2019; Mijares & Radovich, 2020) examined the relationship between mentoring and aspects of nurses' career. Mijares and colleagues found a 27% overall progression of nurses on the career ladder within the healthcare organisation in which mentoring was

implemented (Mijares & Radovich, 2020). Drury et al. (2022) studied the effect of the mentoring program on professional quality of life of the oncology nurse mentors. The authors reported that there was a significant decrease in burnout (from 22.9 to 18.6, $p=0.003$), a significant decrease in secondary traumatic scores (from 22.3 to 19, $p < 0.06$) and a non-significant increase in compassion satisfaction (from 41.3 to 42.7, $p = 0.37$) (Drury et al., 2022). In this study, authors indicate measures were taken at baseline, 6 months and at 12 months however it's not clear which timelines registered a change in the professional quality of life.

Choi and Yu (2022) examined the effects of mentoring functions and found that mentoring had a significant effect on self-efficacy ($\beta=0.50$, $p<0.001$). Gong and Li (2019) found a non-significant direct relationship between the *feedback environment established by mentor* and career adaptability ($\beta=0.13$, $p=0.17$) however they found significant indirect effects via mentee's feedback seeking behaviour.

Summary of effectiveness reported as quantitative synthesis for effectiveness (QSE)

QSE1: The relationship between mentoring and intentions to stay for nurse mentees was mostly negative. On the other hand, there is insufficient evidence regarding intentions to stay for nurse mentors following implementation of mentoring programs.

QSE2: Implementation of mentoring programs seemed to result in a decrease in the levels of job satisfaction for nurses in mentee role. While there was insufficient evidence for nurses in mentor role.

QSE3: Mentoring functions of career development, psychosocial support and role modelling were significantly associated with organisation commitment.

QSE4: Mentoring programs and functions had a positive effect on career and professional progression of nurses by positively impacting professional quality of life, self-efficacy, career ladder and career adaptability. These effects were studied for only mentees.

3.4.3 Narrative synthesis of quantitative findings

Four studies using cross-sectional and mixed methods design explored mentoring functions and relationships (Choi & Yu, 2022; Gong & Li, 2019; Gong et al., 2022; Horner, 2020). In two studies mentoring functions which represented the career, psychosocial support and role

modelling functions had mean scores of 3.44 (Gong et al., 2022) and 3.87 (Choi & Yu, 2022) respectively (highest possible score of 5). While the *feedback environment established by mentor* as function of mentoring generated a mean of 4.89 (highest possible score of 7) (Gong & Li, 2019).

In terms of gender, no significant differences in mentoring functions were shown in both studies (Choi & Yu, 2022; Gong et al., 2022). Gong and colleagues reported a significant negative correlation between age and mentoring relationship (Gong et al., 2022) while Choi and Yu (2022) reported that the older age categories had lower means score on the mentoring function scale although the difference between groups was not significant (Choi & Yu, 2022). In the 2019 study, Gong and Li, reported no significant differences for *feedback environment established by mentor* and gender or age (Gong & Li, 2019).

Mentoring experience reported in the study by Horner (2020) showed that although majority (73%) of the nurses that did not have a mentor upon recruitment into the clinical settings, they (61.5%) would have preferred to have one. In this study mentoring was mainly informal (60%), lasting between one to three months (30%) associated with face-to-face interactions (100%). Willingness to mentor was the most desirable quality in a mentor (86.5%) (Horner, 2020). Furthermore, Horner reported that 9 out of the 10 participants with a mentor indicated that the mentoring relationship had positive impact on their job satisfaction.

Five studies evaluated the participants' experiences with the mentoring programs. Bullock and colleagues reported that overall, mentees agreed or strongly agreed that their mentor was helpful in nine different ways (Bullock et al., 2022). In Mijares' study, 86% of the mentees reported being satisfied with the mentoring relationship (Mijares & Radovich, 2020). When evaluating the level of satisfaction with a mentoring program for mentors and mentees at the medic-surgical unit, the authors reported a mean satisfaction of 49 (possible range of scores= 12-60) for mentees and 33 (possible range of scores= 9-45) for mentors (Krofft & Stuart, 2021).

Following implementation of the mentoring program, mentees rated an improved score of the perceived competency of their mentor (Gayrama-Borines & Coffman, 2021). Moss (2022) evaluated utilisation and meaningfulness of the mentoring kit adapted for neonatal nurse practitioners. Participants in that study utilised 9 out of 12 mentoring activities. They also

showed overall satisfaction with the activities and found the activities directed toward initiation of the relationship most meaningful.

Summary of narrative synthesis (quantitative narrative synthesis—QNS)

QNS1: New nurses in mentoring relationships in clinical settings, often experienced average career, psychosocial, role modelling, and feedback environment functions.

QNS2: New nurses' perceived career development, psychosocial support, role modelling functions in mentoring reduced with age.

QNS3: New nurses' perceived career, psychosocial, role modelling and feedback environment functions were similar between males and females.

QNS4: Overall mentees found various aspects of the mentoring relations/programs helpful. In the two studies that included mentor's perspective, they also showed a high level of satisfaction with mentoring programs.

3.4.4 Meta-synthesis of qualitative findings

The qualitative findings and the qualitative component of the mixed methods study were synthesised to yield four significant findings: Firstly, mentoring programs and relationships provided various benefits. Secondly, the program quality can enable or impede the mentoring experience and outcome. Thirdly, the individual context contributes to the experience and quality of mentoring interactions, and finally, the organisation and profession define the context for mentoring. A comprehensive account of the meta-synthesis is illustrated in the subsequent sections of this study.

Qualitative synthesised finding 1: Mentoring programs and relationships provided various benefits.

Six categories (as shown in Table 3.1) relating to the various benefits realised from mentoring programs for mentor, mentee and organisation are highlighted in this section.

Table 3.1 Showing categories relating to qualitative synthesised finding 1.

Category 1: Mentoring programs were used for recruitment of new nurses in the clinical settings. Findings 25a, 53, 65
<ul style="list-style-type: none"> • Mentoring program enabled recruitment of new nurses (U) • Mentoring was used for recruitment of new graduates (U)

<ul style="list-style-type: none"> • Mentoring as a tool for recruitment (U)
<p>Category 2: Mentoring programs contributed to retention of nurses in acute care settings. Findings 8, 29, 43, 85, 86</p> <ul style="list-style-type: none"> • Mentoring programs reversed mentor's intentions to leave the clinical setting longer (U) • The mentoring environment created a foundation for retention (U) • Mentoring helps with transition of new nurses (U) • When nurses are mentored, they are satisfied with their job (U) • The interpersonal connection created by mentoring was basis for transition (U)
<p>Category 3: Through mentoring, new graduates develop their competence and boost their confidence with nursing practice. Findings 26, 64, 81, 6, 12</p> <ul style="list-style-type: none"> • Mentoring enables translation of theory into practice (C) • Intergeneration mentoring enables the new nurses integrate their theory knowledge into practice (U) • The mentor taught the mentee about their nursing role and developed their leadership abilities (U) • Mentor helped the mentee build their confidence when they are new to the organisation (U) • Mentor helped the new graduate get comfortable and confident in her role (U)
<p>Category 4: Mentoring programs make support accessible and available.</p> <ul style="list-style-type: none"> • Mentoring programs make support accessible. Findings 87 <ul style="list-style-type: none"> ◦ Mentoring provides support in isolated practice (U) • Mentoring programs provide support. Findings 5, 3, 16, 17, 50, 63. <ul style="list-style-type: none"> ◦ Mentoring creates a trusting practice environment to share their experiences (U) ◦ Participating in mentoring [group mentoring] provides opportunity to share your experiences with a colleague (U) ◦ Mentoring provides support to cope in clinical area (U) ◦ Mentoring program provided an opportunity for interpersonal connection with colleagues (U) ◦ Emotional support helped navigate the complex clinical and managerial situations (U) ◦ Mentoring program provided an addition support mechanism [beyond preceptor, manager] (U)
<p>Category 5: The mentor role allowed senior nurses to experience generativity. Findings 2, 28, 72, 74, 75</p> <ul style="list-style-type: none"> • Mentoring makes the mentor feel proud (U) • Mentoring gave the mentors a sense of accomplishment (U) • Mentoring others created a sense of satisfaction with their role as a nursing and mentor (U) • Mentor felt empowered that they were making a significant contribution to the mentee's professional life (U) • Mentor feels is being helpful to mentee (U)
<p>Category 6: Mentoring develops the competence of the mentor. Findings 4, 69, 70</p> <ul style="list-style-type: none"> • Being a mentor provides an opportunity to reflect on my own abilities and on the complexity of nursing practice (U) • Mentoring enabled professional growth of the mentor through allowing for self-reflection (U) • Mentoring enabled professional growth of the mentor through improving abilities such as critical thinking and problem solving (U)

Category 1: Mentoring programs were used for recruitment of new nurses in the clinical settings.

Three unequivocal findings informed this category. In one study the nurse manager indicated that recruitment of nurses for the organisation was done from a pool of new nurses that had been mentored at the same organisation (Coventry & Hays, 2021). While in another study the mentors highlighted the use of mentoring programs as an incentive for the newly graduating nurses

(Rohatinsky et al., 2020). These findings are confirmed by the third study (Austin & Halpin, 2021) in which mentees acknowledge that the mentoring program offered at the hospital influenced their decision to work for that particular organisation as shown in the quote below.

“That was one of the reasons I decided to come here [to the Trust] ... because no other position that I interviewed for actually offered the professional mentorship programme, and that was a deciding factor for me, to have that additional support that was more like pastoral support. And as I was new to London, and [had] lots of stress going on, as well as being a newly qualified nurse” (Austin & Halpin, 2021, p. 674).

Category 2: Mentoring programs contributed to retention of nurses in acute care settings.

Four findings highlighted the role of mentoring programs in the retention of novice and senior nurses in acute care settings. Firstly, positive mentoring experiences laid a foundation for retention (Kramer et al., 2021) and created an enabling environment for transition (Horner, 2020). Providing mentoring to others reversed the senior nurses’ intentions to leave (Jangland et al., 2021). While Horner (2020) reported that nurses that participated in mentoring reported being more satisfied with their job (Horner, 2020). The credibility of these findings was unequivocal.

Category 3: Through mentoring, new graduates develop their competence and boost their confidence with nursing practice.

Three unequivocal findings and one credible finding reported on outcomes of mentoring relating to this category. Availability of mentoring programs in the hospitals enabled the new graduates to develop their competencies by enabling translation of empirical knowledge into practice (Jangland et al., 2021). As shown in one study, newly graduated nurses possess a substantial amount of theoretical knowledge, and mentors played a pivotal role in facilitating the integration of this knowledge into their practical clinical practice (Coventry & Hays, 2021). Mentors also developed novice nurses’ management and leadership abilities (Kramer et al., 2021). The support offered within mentoring relationships not only assisted novice nurses in their professional development but also played a crucial role in fostering their self-confidence and belief in their own abilities (Austin & Halpin, 2021; Horner, 2020).

Category 4: Mentoring programs make support accessible and available.

Seven unequivocal findings reported on support provided through mentoring programs/relationships. The studies highlight that mentoring provided support beyond what is available in preceptorship and clinical supervision (Austin & Halpin, 2021), provided help in navigating complex clinical and managerial situations (Rohatinsky et al., 2020), enabled an environment in which colleagues would interact and share experiences (Coventry & Hays, 2021; Jangland et al., 2021) and contributed towards coping in a complex and isolated clinical practice (Gayrama-Borines & Coffman, 2021; Horner, 2020). Support was not only available, but also accessible as reported in one of the studies:

‘I feel like my PPM worked really well and at the same time, if there was anything that I needed help with on the ward, I would go to my ward and utilise people near me. I use my clinical educators quite a lot.’ (Austin & Halpin, 2021, p. 674)

Category 5: The mentor role allowed senior nurses to experience generativity.

Four findings reported on the sense of accomplishment (Kramer et al., 2021)), sense of pride (Jangland et al., 2021), and a sense of satisfaction (Drury et al., 2022) that mentors associated with mentoring others. Finally, mentors were proud of making a significant contribution to the professional life of the mentee (Gayrama-Borines & Coffman, 2021). These findings were all unequivocal in their credibility.

Category 6: Mentoring develops the competence of the mentor.

In three unequivocal findings mentors acknowledged that mentoring novice nurses also had impact on their own professional growth in terms of developing their own clinical skills. This was through reflection on practice (Jangland et al., 2021) and reflection on one’s own abilities (Drury et al., 2022). Moreover, mentoring processes enabled professional growth of the mentor through improving critical thinking and problem-solving abilities (Drury et al., 2022).

Qualitative synthesised finding 2: the program quality can enable or impede the mentoring experience and outcome.

The studies underscored the critical role played by the program's quality in facilitating successful outcomes of mentoring, particularly in terms of recruitment, retention, and career advancements. These are explained in category 7 to 9 as shown in a section of Table 3.2 below.

Table 3.2 Showing categories relating to qualitative synthesised finding 2.

<p>Category 7: Visibility of the mentoring program. Findings 7, 48, 52, 79</p> <ul style="list-style-type: none"> • Knowing about existing mentoring programs can influence recruitment of new nurses into the programs (C) • Create awareness about the benefits of mentoring (U) • Marketing the mentoring program would enable nurse recruitment through mentoring (U) • Increasing visibility of the mentoring program contributes to a mentoring culture (U)
<p>Category 8: Flexibility of the program to adapt it for context. Findings 36, 44, 46, 60, 62, 84, 89, 90</p> <ul style="list-style-type: none"> • Being flexible improves the experience of mentoring (U) • Flexibility was important in overcoming barriers to mentoring (C) • Mentor and mentee working in different settings enables honesty, and free disclosure of fears and feelings (U) • Flexibility according to mentoring need was an enabler (C) • Face-to-face mentoring is preferred (U) • Flexibility in the program enables a relatable experience (U) • The mentoring programs ought to be variable and versatile to spark interest and maintain engagement (U)
<p>Category 9: Resources available for mentoring. Findings 21, 25, 31, 41, 66, 77, 82, 15, 51, 88</p> <ul style="list-style-type: none"> • Financial constraints affected mentoring programs (U) • The lack of mentor preparation affected the experience of mentoring (U) • The lack of time presents a challenge to mentoring (U) • Coordination provided accountability in mentoring (U) • Nurses have various preferred rewards and recognitions for participating in mentoring (U) • They wish to mentor but they have competing priorities (U) • Nurses were too busy to mentor (U) • The mentor training was helpful in navigating the mentor role and to increase awareness of mentoring benefits (U) • The mentoring kit provided structural support to the mentoring program (U)

Category 7: Visibility of the mentoring program

Three studies in three unequivocal and one credible finding reported on the role increasing visibility of the mentoring programs. Findings highlight that it was not enough for the programs to exist in the hospitals but the new nurses external to the implementing hospital ought to know about existing mentoring programs (Jangland et al., 2021). In one study participants suggested that visibility could be increased by marketing these programs (Rohatinsky et al., 2020). The other two findings highlight the need to increase visibility within the organisation by creating awareness about mentoring activities and benefits of mentoring particularly among the senior nurses (Gayrama-Borines & Coffman, 2021; Rohatinsky et al., 2020) as shown in one study:

“Make it known throughout facilities, encourage it in our workplaces, make it a normal and talked about aspect of nursing! I think it would encourage better culture in our rural facilities” (Rohatinsky et al., 2020, p. 7).

Category 8: Flexibility of the program to adapt it to context.

One important category of findings emphasises the significance of flexibility in mentoring programs, enabling them to adapt to emerging challenges and individual preferences. The presence of flexibility within the program plays a crucial role in overcoming barriers to effective mentoring (Rohatinsky et al., 2020) and contributes to a positive mentoring experience (Austin & Halpin, 2021; Kramer et al., 2021; Moss, 2022). Personal preferences, such as the preference for face-to-face meetings rather than virtual support (Horner, 2020; Rohatinsky et al., 2020), and the option of having a mentor external to the implementing organisation (Austin & Halpin, 2021), were also catered for through flexibility. Furthermore, one study highlights the importance of variability and versatility in mentoring programs to generate interest and sustain engagement (Moss, 2022). Five of these findings were unequivocal and two findings were credible.

Category 9: Resources available for mentoring.

Resources are a crucial factor that can either facilitate or hinder the implementation of mentoring programs and significantly influence the overall mentoring experience for the participants. This significant aspect was highlighted in ten unequivocal findings. Among the various resources, time emerged as the most critical constraint in mentoring (Austin & Halpin, 2021; Gayrama-Borines & Coffman, 2021; Kramer et al., 2021; Rohatinsky et al., 2020). In other studies, mentors reported being too busy (Coventry & Hays, 2021) or having conflicting priorities (Horner, 2020). The lack of mentor preparation resulted in a less effective mentoring experience (Kramer et al., 2021), whereas studies that provided mentor training reported a more positive experience reporting that, training helped them clearly define their roles and responsibilities (Rohatinsky et al., 2020).

Effective coordination, facilitated by strong leadership, was found to be crucial in holding mentoring dyads accountable (Rohatinsky et al., 2020). In Moss's study, structural support was provided through the use of a mentoring toolkit (Moss, 2022). In one study, mentors expressed

their preferred rewards for engaging in mentoring (Coyne et al., 2020), whereas in the study done in Australia, nurse managers acknowledged that financial constraints could significantly impact mentoring programs (Coventry & Hays, 2021).

Qualitative synthesised finding 3: the individual context contributes to the experience and quality of mentoring interactions.

This section consists of Categories 10 to 13 that highlight the attributes relating to the individual mentor/mentee and elaborates on how they influence effectiveness of mentoring programs as shown in Table 3.3 below.

Table 3.3 Showing categories relating to qualitative synthesised finding 3.

<p>Category 10: Adapting informal mentoring principles. Finding 32, 33, 37, 11,</p> <ul style="list-style-type: none"> • The desire to support others overcomes the barriers to mentoring (U) • Focussing on the potential benefits to mentoring to overcome the perceived barriers (U) • It important to view mentoring as a part of your nursing role (C) • Nurses' willingness to engage in mentoring enabled connectedness in the relationship (C) • The informal nature of the experience made mentoring less overwhelming (U) • Informal approaches are a good starting point (U)
<p>Category 11: The view that mentoring is bi-directional. Findings 27, 76</p> <ul style="list-style-type: none"> • Mentoring was equally beneficial to the mentor and mentee (U) • Trust is what defines quality mentoring (U)
<p>Category 12: Aligning individual goals and expectations. Findings 19, 20, 38, 39, 67, 40, 80</p> <ul style="list-style-type: none"> • If the mentoring goal was not achieved, it created frustration in the mentor (U) • Unaligned expectations presented challenges to mentoring (U) • Shared understanding of each other's mentoring goals enabled mentoring (C) • Constant communication with mentoring coordinator enabled mentoring (C) • Being from same community as the mentor enabled the mentoring experience (C) • The mentoring needs vary at each stage of the mentoring relationship/program (U) • New graduates have various desirable qualities in a mentor (U)
<p>Category 13: One's identity contributes to the experience of mentoring. 10, 35, 34,</p> <ul style="list-style-type: none"> • Age is just a number in mentoring processes (U) • Gender influences the lens in which we view mentoring. (U) • Culture influences the lens in which we view mentoring. (U)

Category 10: Adapting informal mentoring principles.

Four studies shed light on the participants' perspective regarding the incorporation of informal mentoring principles into mentoring program implementations. The nurses expressed that the desire to support others and focussing on the potential benefits to mentoring helped them to overcome the barriers in mentoring (Kramer et al., 2021). They highlighted the importance of

considering mentoring as an integral part of their daily nursing role rather than an additional responsibility (Coventry & Hays, 2021). The nurses' willingness to engage in mentoring played a crucial role in establishing a sense of connection within the mentoring relationship (Rohatinsky et al., 2020). Interestingly, in another study, the informal nature of the experience alleviated the sense of overwhelm often associated with mentoring (Rohatinsky et al., 2020). Regardless, informal approaches were regarded as a valuable starting point (Gayrama-Borines & Coffman, 2021) enabling mentors to initiate relationships with new nurses. These findings were both unequivocal (four findings) and credible (two findings).

Category 11: The view that mentoring is bi-directional.

The view that mentoring is bi-directional was raised in two studies, these findings were unequivocal. Nurses viewed mentoring as being equally beneficial to both the mentor and mentee (Kramer et al., 2021). In fact, in the study by Gayrama-Borines and the colleague, the trust built between the mentor and mentee in the relationship was what defined the effectiveness of the relationship (Gayrama-Borines & Coffman, 2021) as a participant stated:

“they have to be able to trust each other. We had two come together, one a new graduate and had Medsurg experience and they just bonded I mean they are like this (hand signal—two fingers together)...you know what I mean...that is a true mentorship”
(Gayrama-Borines & Coffman, 2021, p. 110)

Category 12: Aligning individual goals and expectations.

The studies (in four unequivocal and three credible findings) recognised that individuals in mentoring relationships possess unique needs, goals, and expectations that evolve throughout the different stages of the mentoring journey (Horner (Horner, 2020). Failure to achieve or align these expectations often resulted in feelings of frustration among the mentoring dyads (Coventry & Hays, 2021). To address this challenge, some studies emphasised the importance of constant communication to establish a shared understanding of goals (Rohatinsky et al., 2020). Employing strategies such as finding commonalities, for example, hailing from the same community (Rohatinsky et al., 2020), or matching dyads based on shared priorities (Moss, 2022; Rohatinsky et al., 2020), helped ensure alignment of expectations.

Category 13: One's identity contributes to the experience of mentoring.

Findings also underscored the significance of individual characteristics in shaping the experience and effectiveness of mentoring. Nurses engaged in intergenerational mentoring regarded age as an irrelevant factor, perceiving it as merely a number (Coventry & Hays, 2021). Conversely, in the study conducted by Kramer and colleagues, gender was found to influence the perspectives and experiences of mentoring (Kramer et al., 2021). Furthermore, the same study revealed that culture played a significant role in shaping one's perception of mentoring, as exemplified in the following quote:

“Culture is very important because there’s things, I could say that you don’t understand...I’m telling you our expressions, facial expressions...people don’t understand me” (Kramer et al., 2021, p. 20)

Qualitative synthesised finding 4: the organisation and profession define the context for mentoring.

This meta-synthesised finding describes two categories, 14 and 15, as they relate to role of the organisation and profession in the success of mentoring in the hospital settings. This is illustrated in Table 3.4 below.

Table 3.4 Showing categories relating to qualitative synthesised finding 4

<p>Category 14: The relationship between mentoring and the organisational context. Finding 5, 23, 24, 18, 30, 49, 56, 57, 71,</p> <ul style="list-style-type: none"> • Mentoring creates a trusting practice environment to share their experiences (U) • Mentoring as an opportunity to transmit the organisation culture of support and respect (U) • Mentoring as an opportunity to build a culture of patient safety and quality care (U) • Mentoring was away for building a supportive clinical environment (U) • Mentoring was important for sustaining patient safety (U) • Management active involvement contributed to an enabling mentoring culture (Un) • Workplace dynamics affect the relationship between mentoring and turnover intentions (U) • Organisation status and culture affect the outcome of mentoring (U) • Mentoring enabling a trusting clinical environment (U)
<p>Category 15: The role of the professional context in nurse mentoring. Findings 13, 14, 83</p> <ul style="list-style-type: none"> • Mentoring between generations provides an opportunity to return to the core values of nursing practice (U) • Mentoring programs are an opportunity to value the contribution of staff to the organisation (U) • They wish to mentor but their expertise is not what the program needs (U)

Category 14: The relationship between mentoring and the organisational context

The relationship between mentoring and the organisational context revealed a dual influence, as identified in five studies. Mentoring was found to have an impact on the practice environment by fostering a culture of patient safety and quality care (Coventry & Hays, 2021; Kramer et al., 2021), and promoting a collegial support system (Coventry & Hays, 2021; Jangland et al., 2021). Moreover, the organisational context significantly influenced the implementation and outcomes of mentoring. For example, the workplace dynamics played a role in nurses' decisions to remain in the organisation upon completion of the mentoring program (Rohatinsky et al., 2020). The authors of that study concluded that active involvement of management contributed to the establishment of an empowering mentoring culture (Rohatinsky et al., 2020).

Category 15: The role of the professional context in nurse mentoring

The studies also acknowledged the importance of the nursing professional context in mentoring. Nurses perceived engaging in mentoring as an opportunity to reconnect with the core values of nursing (Coventry & Hays, 2021). Furthermore, mentoring was found to emphasise the value of expertise. These studies revealed that the nursing profession plays a crucial role in defining and recognising expertise, determining which forms of expertise are celebrated and rewarded, and identifying areas where further development is needed (Horner, 2020).

3.4.5 Mixed methods synthesis

Synthesised findings from the qualitative findings and quantitative results were integrated in a mixed methods approach. This gave rise to three integrated findings (1) current mentoring practices (2) benefits and outcomes of mentoring practices and (3) challenges and opportunities in mentoring. These have been described in detail below.

Synthesised integrated finding 1: current mentoring practices.

All the studies included in the review showed that nurses are actively engaging in mentoring programs to facilitate recruitment and support newly graduated nurses and those transitioning into practice. These mentoring initiatives aim to assist nurses new to a specific unit or venturing into advanced practice. The predominant approach to mentoring is one-on-one interaction, where experienced nurses offer guidance and expertise to their mentees. In order to cater to the unique needs of their respective healthcare settings, nurses are either designing novel mentoring programs or modifying well-established ones to suit the hospital context. The implementation of

mentoring programs predominantly adheres to quality improvement principles, ensuring that these initiatives are effective and beneficial. Additionally, it is noteworthy that most programs are founded upon a middle-range theory, providing a solid theoretical framework for their design and operation.

Synthesised integrated finding 2: benefits and outcomes of mentoring practices.

The effectiveness of mentoring programs and their various functions for retention has been assessed through four data syntheses focusing on effectiveness, as well as six categories derived from qualitative data synthesis. Category 1 highlights the successful utilisation of mentoring programs in the recruitment of nurses for hospitals. At the same time, QSE1 and QSE2 indicate that the implementation of mentoring programs led to a decrease in nurses' intentions to stay and a decline in their levels of job satisfaction, specifically among newly graduating nurses. On the other hand, Category 2 reveals that mentoring relationships played a significant role in nurses' decisions to stay working at their respective organisations. QNS4 and category 5, mentoring played a role in the experience of generativity for mentor nurses. These aspects result from a degree of satisfaction with the nursing and mentoring role.

Furthermore, QSE3 demonstrates that mentoring functions, such as career development, psychosocial support, and role modelling, positively impact nurses' organisational commitment. It is important to note that the findings relating to the role of mentoring in retention are conflicting. This can be attributed to the small sample sizes in the experimental studies and the bias present in the design of projects, particularly the lack of randomisation and control and the use of standardised measures. Furthermore, the experimental studies evaluated the programs before and after design and did not determine the moderating effects of the quality of the mentoring relationship on the mentoring outcomes.

QSE4 provides insights into the implications of mentoring programs on various aspects of nurses' careers, including progression, career adaptability, and professional quality of life. QNS1 findings indicate that novice nurses reported experiencing moderate levels of career, psychosocial, and role modelling functions within their mentoring relationships. Category 3 further elucidates these quantitative findings by demonstrating that mentoring contributes to developing competence and confidence among newly graduated nurses. Moreover, Category 4

emphasises that mentoring programs provide accessible and available support, enhancing nurses' clinical practice. It is worth noting that Category 6 highlights the impact of mentoring on the career aspect of mentors, although this aspect remains understudied in quantitative investigations. In summary, the collective evidence from QSE4, QNS1, Category 3, Category 4, and Category 6 underscores the positive influence of mentoring on nurses' careers.

Synthesised integrated finding 1: challenges and opportunities in mentoring.

Synthesised findings 2, 3, and 4 from the qualitative meta-synthesis and QNS 2 and 3 from the quantitative narrative synthesis report on factors that can enable or impede the implementation of mentoring programs and the development of quality relationships.

3.5 Limitations.

This review encompasses studies of varying methodological quality, which may have implications for applying recommendations from this review. It is important to note that no randomized controlled trials were included in the review, further affecting the quality of the recommendations. Additionally, the diverse program designs and measurement scales used to assess mentoring outcomes made it challenging for the researcher to synthesise these findings through a meta-analysis.

3.6 Implications for practice

The integrated findings regarding effectiveness, challenges, and opportunities for mentoring in clinical practice have implications for practice and policy.

- Mentoring programs can be used to recruit newly graduating nurses if they have been well-marketed to increase visibility.
- Adapting already developed mentoring programs from nursing organisations and associations can save the time and resources needed to design new programs. These adapted programmes should, however, be flexible to accommodate the organisation's context and available resources.
- Nurse managers ought to be aware that individual characteristics such as age, gender, culture, career optimism, and feedback-seeking behaviours may impact the outcomes of mentoring.

3.7 Implications for research

The integrated findings reveal methodological challenges, particularly in the design of quasi-experimental studies. Nursing researchers need to use more rigorous methods to design and evaluate mentoring programs. Notably, there is a need to evaluate the effect of confounding and moderating factors, such as the quality of mentoring relationships, on the outcomes of mentoring. Future research also oughts to study mentoring experiences of mentors to understand how mentoring programs impact this group of experienced nurses.

3.8 Chapter summary

The updated literature search yielded 16 studies across 17 articles. In order to provide an updated literature review, the researcher employed a mixed methods systematic review methodology to analyse and synthesise these recent findings. This approach allowed for integrating both quantitative and qualitative studies, enabling a comprehensive understanding of the outcomes of mentoring and the underlying mechanisms behind these outcomes. The synthesised findings align with the results presented in Chapter 2, Section 2.3, reaffirming the significance of both the benefits and challenges associated with mentoring outcomes. However, the newer articles offer a distinct advantage as they provide comprehensive descriptions of mentoring programs, thereby contributing to an additional synthesised theme on "current mentoring practices." The integrated findings highlight the benefits and outcomes of mentoring practices, focusing on illuminating the mechanisms through which mentoring programs impact retention and career development.

Furthermore, the updated literature review demonstrates that mentoring programs can effectively be utilised to recruit new nurses in hospitals. It is also highlighted that establishing high-quality mentoring relationships positively impacts the organisational commitment of nurses. Moreover, qualitative findings support the notion that mentoring experiences contribute to positive retention outcomes. Moreover, the last integrated finding sheds light on the obstacles faced while implementing mentoring programs while uncovering potential opportunities that can be harnessed in the design and execution of such programs.

In order to enhance the validity of evaluating mentoring programs, nurse researchers must employ rigorous research methodologies and increase sample sizes in experimental studies.

These measures will contribute to the overall improvement of the evaluation process and provide more robust evidence regarding the effectiveness of mentoring programs in nursing.

CHAPTER 4: THE THEORETICAL FRAMEWORK

4.1 Chapter introduction

One of the important aspects of reviewing the literature is identifying theories used to study and understand the phenomenon of interest (Creswell & Creswell, 2017). A mentoring program is built on a triad relationship consisting of the mentee, mentor, and the organisation where the interaction occurs. This triad relationship is complex and affects the effectiveness of the program. Several theories have been identified in the studies on mentoring programs to understand the complexity of mentoring. In this chapter, the researcher reviews theories that have been carefully chosen based on their relevance, applicability, and potential to provide a comprehensive understanding of the mentoring phenomenon in this specific context. Firstly, theories focusing on the mentor and mentee are described. Secondly, the theories that concentrate on the mentoring process are reviewed, before finally examining the theories that focus on the triad relationship. In conclusion, this chapter justifies the selection of three theories that have been chosen to study mentoring in the context of nurses and midwives working in Ugandan hospitals.

4.2 Theories that focus on mentor and/or mentee.

In the studies reviewed (see Chapter 2), some research focused exclusively on theories pertaining to either the mentee or mentor-mentee relationship (Adeniran et al., 2013; Fleig-Palmer & Rathert, 2015; Mariani, 2012; Pham et al., 2019; Ronsten et al., 2005; Schroyer et al., 2020). These theories are the Self-efficacy theory, social capital theory, social cognitive career theory, Kolb's experiential learning theory, Benner's novice to expert, the constructivist theory, and Kram's mentoring functions. Moreover, a study by Mariani (2012) used Peplau's theory to study the relationship between the mentor and mentee but excluded the relationship with the organisation (Mariani, 2012).

The social cognitive theory suggested by Albert Bandura (Bandura, 1993; Bandura & McClelland, 1977) emphasises the interplay among the individual, behaviour, and environment. It suggests that individuals learn new behaviour through direct experiences and imitating their models in the environment. Individual characteristics such as self-efficacy are important in

learning and adapting new behaviour. Self-efficacy influences the career goals an individual sets and their dedication to achieving these goals. Individuals carefully consider their capabilities before setting goals (Bandura, 1993). Achieving these goals leads to the adoption of new behaviours. The individual, the behaviour, and the environment all interact reciprocally where adapted behaviour affects the environment, and the environment influences which behaviours are expressed or suppressed (Bandura & McClelland, 1977). Social Cognitive Theory offers a theoretical explanation of how a learner, new graduate, and mentee adapt to new behaviour in the clinical environment.

As used by Pham et al. (2019), social capital theory was developed by Coleman (1988), who defines social capital as a capital resource an individual possesses arising from their relations with other persons. Social capital is an asset. It can produce results or achieve goals that would otherwise be impossible. Social capital serves as an asset capable of producing outcomes or achieving goals that would otherwise be unattainable. It manifests in three forms, with the first being the belief in reciprocity among members within a network of relationships. Actors anticipate that favours extended to others will be reciprocated. Members trust that individuals will fulfill their obligations to return favours. This trust level sustains social capital among group members (Coleman, 1988). Information constitutes the second source of social capital. Social relationships are formed and sustained primarily for the purpose of gaining information, which is crucial for achieving personal objectives (Coleman, 1988). Lastly, social capital is reinforced through the establishment of effective norms and sanctions. Norms are implemented to ensure that members of a group act in the best interest of the collective. Adherence to these norms is encouraged through rewards, while violations are met with sanctions. The interaction between mentor and mentee represents a form of social capital, granting the new graduate access to the skills and knowledge of the experienced nurse. The quantity and quality of these interactions significantly affect the outcomes of this social relationship. Structural deficiencies and weak ties result in the new graduate's inability to access and benefit from the mentor's expertise (Coleman, 1988). The individual can benefit directly from social relations with the mentor and indirectly from the mentor's network. Social capital in these mentoring studies focuses solely on the relational benefits of mentoring relationships ignoring the processes and environment in which these relationships occur.

However, this theory might not be well-suited for formal mentoring programs, as mentees may possess limited social capital to share with their mentors. Consequently, they should not face sanctions for failing to contribute equally to the social capital within the mentoring relationship. Moreover, the theory pays scant attention to the direct role of the organisation in fostering mentoring. Additionally, it does not delve into the other benefits of mentoring, especially for the mentor and the organisation.

The experimental learning theory was used in the study by Schroyer and colleagues was developed by D.A. Kolb (Schroyer et al., 2020). Kolb (1984) emphasises the significance of direct experience in learning, suggesting that learning is a process and not an outcome. In other words, knowledge comprises of ideas that are not static or immutable. Old ideas are either further developed by integration or replaced by substitution (Kolb, 1984). Learners enter a learning situation with prior knowledge. The role of the teacher is to facilitate learning by allowing learners to examine their beliefs and theories and test them in the environment, leading to the formation of new ideas that are incorporated into their belief system. According to Kolb (1984), learning happens in a cyclical process, with the first step being exposure to a concrete experience in the classroom or professional environment. This is followed by reflective observation, in which the learner reflects on the experiences they just encountered. The third step is abstract conceptualization, in which the learner assembles the ideas from reflection into concepts that form a theory. In the last step, the learner tests their theory in the practice environment in active experimentation. Experimental learning theory views the learner as an active entity engaging in a process of self-directed learning in which they examine their preconceived ideas in the practice environment. Experiences in the clinical environment allow the learner to generate new ideas hence new knowledge, which is constantly reshaped by new experiences (Kolb, 1984). This theory views the mentee as a learner in the practice environment. However, it places less emphasis on learning goals, behavioural changes to achieve the goal, and organisational support for the learners that a formal mentoring program typically emphasises.

Benner's theory of novice to expert was applied in studies by Mariani (2012) and Schroyer et al. (2020), which explain the five stages a new graduate nurse undergoes to develop competence. Benner adapted the Dreyfus model in studying competence among nurses working in clinical settings (Benner, 1982). The first stage is that of the novice. This is a beginner nurse with no

clinical experience. Clinical situations are evaluated, and tasks are performed based on objective attributes such as weight and temperature. These tasks are performed against set guidelines. The nurse at this stage is very task-oriented (Benner, 1982). The second stage is that of an advanced beginner, where actions are informed by previous experiences. At this stage the nurses begins to recognise subjective cues called ‘aspects’ indicating changes in a patient’s status. The third stage is that of a competent nurse, characterized by a high level of analytical thinking (Benner, 1982). The nurse's workday is structured around set goals and plans. Although analytical, the nurse at this stage lacks flexibility and may still perform tasks slowly (Benner, 1982). However, the nurse is better able to cope and demonstrates improved coordination in clinical situations. The proficient nurse views clinical situations wholesomely, not just attributes and aspects (Benner, 1982). The expert nurse is the final level of the clinical competence stages, where the, the nurse is very intuitive; they have accumulated tacit knowledge that is not easy to access. Their actions are based on accumulated experience and are sometimes unjustifiable but scientifically correct (Benner, 1982). Benner acknowledges the role of the mentor in guiding the mentee at the various stages of their clinical competence development (Benner, 1982). Although this theory provides a classification for identifying novice and senior nurses, it has two main limitations. Firstly, the theory focuses on skill acquisition, ignoring the knowledge and affective changes vital for adapting and socializing new nurses in the clinical environment. Secondly, the theory does not provide insight into the mentoring processes, outcomes, and organisational support in a formal mentoring program.

In the study by Mariani (2012), Peplau’s theory of Interpersonal Relations was used to examine mentoring outcomes. Peplau’s theory centres on interpersonal relations between two individuals. Originally Peplau developed the theory based on nurse-patient dyadic relationships (Peplau, 1997). Peplau analyses dyadic interactions as social relations that evolve through three stages orientation, working, and termination (Peplau, 1997). The orientation phase is when the two individuals become acquainted with each other necessitating active listening and empathy. The actors should demonstrate concern and interest in the needs of the other. At this stage, preconceptions should be examined and changed where necessary since they impact the outcome of the relationship (Peplau, 1997). In the working phase, individuals engage in activities that help them achieve their goals such as teaching, learning, counselling, and feedback. The termination phase marks the end of the relationship. Peplau also acknowledges that this relationship can

become long-term, for example, if the patient has a chronic condition (Peplau, 1997). This theory outlines the progression of the mentoring relationship and its evolution. Nonetheless, it does not account for organizational support and the mentoring processes within a formal mentoring program.

4.3 Theories that focus on the mentoring process.

Ronsten et al. (2005) used the Sympathy-Acceptance-Understanding-Competence (SAUC) model in their confirming mentorship study. The SAUC model is based on the self-relation support theory (Gustafsson & Willman, 2003). In the self-relation theory, the person is an acting individual that bases their activities on goals. Individuals go through four phases from the actual self (that is, the person they are) to the ideal self that they wish to be:

- Self-assessment: in this stage the individual evaluates their beliefs.
- Self-determination: the individual set their desired goals.
- Self-integration: during which they engage in activities to achieve their goals.
- Self-realisation: during which they attain their goals

In between the phases, the person engages in self-reflection. Mentoring takes the mentee through these stages using the SAUC model. The s-phase in the model is about the mentor expressing sympathy and getting the mentee involved in clinical experiences. The New nurse might be anxious and lack confidence. The mentor works to motivate and boost their confidence. The A-phase is characterised by the mentor establishing acceptance of the mentee and supporting the mentee's influence in the clinical area. The mentor supports the new nurse to express themselves in the clinical area. The new nurse may have difficulties understanding clinical concepts and the clinical situation. The U-phase is about the mentor acquiring understanding, while the mentee individualises their practice. The new nurse might have difficulty evaluating clinical situations holistically. The mentor helps the new nurse view the self and the patient holistically while appreciating human uniqueness. The C-phase is about the mentor demonstrating competence and the mentee building trust; at this stage, self-realisation is evaluated based on professional and personal goals. Mentor support is centred on identifying resources to help the new nurse achieve personal and professional growth. Although this theory emphasises the mentees' self-direction to

achieve their goals and the role of the mentor in helping the mentees, it has a few components of organisational support that are crucial in a formal mentoring program.

Fleig-Palmer and Rathert (2015) utilise Kram's work as a theoretical framework for their study. According to Kram, a mentoring program has psychosocial and career functions (Ragins & Kram, 2007). The behaviours that lead to psychosocial functions include modelling, counselling, friendship, and activities that lead to career outcomes include teaching, protection, sponsorship and visibility. Each mentoring function has separate outcomes for the mentee (Ragins & Kram, 2007). Career outcomes include promotions and career development, while the outcomes of psychosocial support include self-efficacy and personal growth. Furthermore, the mentor delivers these functions in varying degrees across the lifespan of the mentoring relationship. Factors such as the mentor's position, the mentor's level of experience, mentee's needs affect the type of mentoring function experienced in the relationship (Ragins & Kram, 2007). Although Kram's Mentoring theory is useful for analysing mentoring functions and the factors affecting them, it overlooks the organisational factors and relational characteristics that affect mentoring in a formal mentoring program. Furthermore, in this theory, the mentee is viewed as the passive recipient in the mentoring relationship ignoring the mentoring behaviours and responsibilities they bring to the interaction.

Pop (2017) and Angelini (1995) utilised grounded theory methodology to develop mentoring theories. In Angelini's study, the author identified two mentoring models; the structural model which emphasised the role of clinical events, the environment, peers, and colleagues in influencing the mentoring relationship through barriers and expectations. The second model highlighted the phases of mentoring, ranging from the individual characteristics that participants bring to the relationship to the outcomes of mentoring. Pop (2017) has similar findings in which she elaborates that mentoring has three categories that involve forming, developing, and outcomes of the relationship. Both theories focus on the process of mentoring. Unlike Pop (2017), Angelini (1995) article shows the organisation's influence on the mentoring process; however, the author limits her study to outcomes for the mentee, making the relationship a unidirectional one.

4.4 Theories that focus on the triad relationship (the mentee, mentor and organisation).

Three studies applied Zey's mutual benefits model (Jakubik, 2008; Jakubik et al., 2011; Weese et al., 2015) that emphasises benefits and responsibilities for the mentee, the mentor, and the organisation in the triad relationship (Zey, 1991). Zey acknowledges that mentees have different career levels and different mentoring needs. The mentoring needs determine the level of help the nurse will need from the mentor. At level one, the mentee is in the early stages of their career, so their mentoring needs are competence-based. At this level, the mentor engages in teaching activities that develop the mentee's skills (Zey, 1991). At level two, the mentee needs personal support, for which the mentor offers counselling (Zey, 1991). The third level, the mentee, must build a professional network within the organisation. The mentor supports this by creating opportunities for the mentee to meet others in the organisation and demonstrate competence (Zey, 1991). The mentee is ready to move up the career ladder in the last level four. The mentor supports the mentee by providing recommendations for the mentee (Zey, 1991). The mentor invests time, emotions, and reputation at all levels of the mentee's career. All this benefits the mentee, the mentor, and the organisation where they work. The mentee acquires knowledge, personal support, protection, and promotion while the mentor becomes recognised within the organisation in addition to loyalty and getting more work done (Zey, 1991).

On the other hand, the organisation benefits from all mentee and mentor achievements through increased retention rates, productivity, and employee advancements (Zey, 1991). Although Zey's mutual benefits model shares some similarities with the social exchange theory by Blau (1964), which is widely recognised in peer support in an organisational context, the model has limitations in analysing socially constructed conditions that enable or impede the mutual benefits in the mentor-mentee dyad. In addition, Zey's mutual benefits model also has limitations in analysing organisational support for employees (mentors and mentees) in a dynamic work environment (Eisenberger & Stinglhamber, 2011) where policies, resources, and leadership are imperative in order to sustain the mentoring program and achieve the outcomes.

Table 4.1 Theories or frameworks used in the reviewed studies

Theories or frameworks	Description of the theory in the study	Studies that used the theory	Strengths and limitations
Theories that focus on mentor and/or-mentee			
Bandura's Self-efficacy theory	Mentor influence on the self-efficacy of mentee and that self-efficacy is responsible for career and professional of mentees	Adeniran et al. (2013)	Shows the progression of the mentee and the role of self-efficacy in achieving career goals and adaptation. Focuses on only the mentee.
Benners novice to expert	A graduate nurse's career grows along a continuum developing from novice to advanced beginner to competent to proficient to expert.	Mariani (2012); Schroyer et al. (2020)	This theory explains the progression of the new graduate from novice to expert. Focused only on skill acquisition ignoring the knowledge and affective competencies essential for adaptation and professional socialization.
Kolb's experiential learning theory	Mentees are active entities in the learning process therefore direct experience is vital for learning to occur.	Schroyer et al. (2020)	Provides an explanation of how mentoring provides learning opportunities for the new nurse. Focused on the mentee only.
Peplau's theory of Interpersonal Relations	In order for mentee-mentor relationship to be successful, it moves through orientation, working and termination phases.	Mariani (2012)	Explains the development of the mentor-mentee relationship. Focused on the mentor-mentee relationship.
Social capital theory	The use tangible and non-tangible resources accumulated from previous interpersonal interactions in current relationships between the mentor and mentee	Pham et al. (2019)	Mentoring provides a mentee with resources that they can use for their future interactions in the workplace. Focused on the mentee only.
Social cognitive career theory	Career interests of a mentee are dependent on their efficacy and outcome expectations	Pham et al. (2019)	Self-efficacy influences the outcomes of a mentoring relationship for mentee. Focused on the mentee only.
Theories that focused on the mentoring process			
The Sympathy-Acceptance-Understanding-Competence (SAUC) model	Mentoring works to improve positive self-assessment, reduce negative self-assessment, and strengthen competence through four phases. The phases include expressing sympathy, establishing acceptance, acquiring understanding and manifesting competence	Ronsten et al. (2005)	This model studied how mentoring develops the confidence of the mentee. Focused on the mentee only
Kram's Mentoring theory	Focused on mentoring functions of counselling, role modeling, protection, acceptance, confirmation, friendship and knowledge transfer	Fleig-Palmer and Rathert (2015)	Explains the career and psychosocial functions of mentoring. Focused on the processes of mentoring

A three-phase theory of mentoring	Used Grounded theory methodology to generate a theory for mentoring that consists of three phases i.e. relationship formation, relationship development and outcomes of mentoring	Pop (2017)	Explain the development of mentoring relationship. Focuses on only the mentoring process.
Structural and process model of mentoring	Used grounded theory to generate structural and process models.	Angelini (1995)	Describes the challenges, rewards, processes, and outcomes of mentoring. Focuses on the influence of factors outside of the mentor-mentee on the mentoring process.
Theories that focus on the triad relationship			
Zey's mutual benefits model	Mentoring has mutual benefits for all the three stakeholders i.e. the mentee, mentor and the organisation.	Jakubik (2008); Jakubik et al. (2011); Weese et al. (2015)	Explains the responsibilities and benefits of mentoring for mentee, mentor and organisation. The theory ignores the social interaction of stakeholders.

4.5 The Theories utilised in this study.

The present study has considered the strengths and the limitations of the theories and frameworks (Table 3.) applied to the previous studies and selected three theories: the self-efficacy, social exchange theory, and organisation support theory, to enhance an understanding of the complex issues in the triad relationship among the mentee, mentor and the organisation in hospital settings. Together, these theories and findings from the systematic review and phase 1 and phase 2 studies in this Ph.D. project will inform a mentoring model specific to mentoring for nurses and midwives in hospitals in Uganda.

4.5.1 The self-efficacy theory

The self-efficacy theory developed by Bandura (1977) posits that an individual will engage in behaviour based on the belief in their abilities to execute it to the desired level. Therefore, the role of psychological procedures in adopting a behaviour lies in creating and strengthening expectations of one's efficacy (Bandura & McClelland, 1977). Self-efficacy varies in magnitude, strength, and generality. The magnitude of efficacy is the ability to perform tasks at different levels of complexity. Strong efficacy is firm in the presence of adversity, while the generality of self-efficacy is about the ability of an individual to apply efficacy expectation to relatively different tasks (Bandura, 1977). Psychological procedures improve the magnitude, strength, and generality of self-efficacy through mechanisms of performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal.

Performance accomplishments allow individuals to improve their self-efficacy through participation in actual or simulated experiences. Successful experiences of mastery increase the efficacy expectation of the individual (Bandura & McClelland, 1977). Vicarious experiences build self-efficacy through the process of the individual observing others perform those tasks that they consider intimidating. Words of encouragement, such as feedback during tasks performed, are a form of verbal persuasion, while focusing on the feelings, such as anxiety that arise from certain tasks, builds self-efficacy through emotional arousal (Bandura, 1977). As long as the individual possesses the basic skills and support mechanisms exist, self-efficacy is the major influence on behaviour amidst barriers and challenges in the workplace (Bandura, 1993).

Self-efficacy theory applied to mentoring programs for hospital nurses.

Self-efficacy theory has been applied to mentoring programs for hospital nurses (Hoover et al., 2020; Pham et al., 2019). Mentoring programs can build the self-efficacy of a new graduate nurse or a less experienced nurse, helping them adapt and fully function in the hospital setting (Zhang et al., 2016). There are three main approaches to developing the mentee's self-efficacy: career functions such as mastery experience, role modelling, and psychosocial functions (Green & Jackson, 2014; Ragins, 2016; Ragins & Kram, 2007). Senior nurses can provide opportunities for novice nurses to participate in actual clinical experiences, improving their mastery experience. Senior nurses, as role models, can also exemplify good nursing practice, behaviour, and career advancement. By providing psychosocial support, the mentor can assist the mentee in exploring their emotions of anxiety and frustration in the clinical environment.

Furthermore, verbal persuasion from a mentor can be a source of encouragement for the mentee in the clinical environment. Mastering experience, role modelling, and psychosocial development enable the mentee to adapt their practice in an organisational context, develop a career, and be retained in clinical practice. Therefore, the self-efficacy of a novice nurse or less experienced nurse is built as they interact with a senior colleague in a formal mentoring relationship. The mentoring process also allows the mentor to develop their ability to mentor. Furthermore, to role model good practice, the mentor must find ways to better their competencies. Self-efficacy theory can explain mentoring processes and outcomes for the mentor and mentee.

4.5.2 The social exchange theory

The social exchange theory was used to understand the relational interactions among the mentor, mentee, and organisation. The social exchange theory coined by Blau (1964) is based on the belief that human interactions are governed by an inherent social requirement always to reciprocate favours. The social exchange involves voluntary actions intending to return a favour previously granted by another individual. This inherent desire of individuals to reciprocate favours is the start of human interactions whereby when a favour is reciprocated, more favour will be given hence sustaining a give-and-take relationship (Blau, 1964). In each organisation, the obligation to return a favour is implicit, and the size and extent of the rewards are usually undefined. Nevertheless, the giver can always rely on the receiver to reward the benefits they receive, making it a trusting relationship.

Three conditions shape the outcomes of social exchange. First, the stage and character of the interaction, for example, the initial meeting of the two partners, can determine whether the relation will be agreeable or antagonistic. The individual characteristics and willingness to interact in a dyadic relationship determine the type of bond that develops and how long it will last. The character of the relationship should be that of trust. In social exchange, one individual has a need the other can satisfy it. In this dyad, one individual builds commitment to the relationship due to the limited available options to access and fulfill their needs (Blau, 1964). As long as one is willing to offer the need and the other to reciprocate with rewards, then the relationship will be sustained until such a time as the need no longer exists or there are no longer rewards for effort (Blau, 1964). Secondly, individuals in a relationship always evaluate the benefits and costs of the interaction. The rewards are socioemotional and include respect, admiration, and approval, all of which should not be bartered and should be subliminal. Any rewards with a hidden agenda of obtaining favours threaten this two-way relationship. Human interactions are costly in time and energy. Individuals in the relationship subconsciously evaluate the positive and negative consequences against available alternatives (Blau, 1964). In social exchange, for the interaction to be sustained, benefits should always outweigh the cost and be more beneficial than alternative sources of rewards.

Lastly, the social context in which the interaction occurs affects the relationship. The context determines the value assigned value to the actions and behaviours. Sometimes the rewards of respect and approval are embedded in a context that the rewards come from colleagues or the organisation at large (Blau, 1964). The demand and supply of particular competencies within an organisation determine the rewards attached to human interaction. The roles of the involved parties and the distribution and regulation of power within the organisation determine and control the interaction (Blau, 1964). All these conditions interact to build a long-term relationship that is beneficial to one and rewarding to the other.

The social exchange theory applied to mentoring programs for hospital nurses.

Formal mentoring is a professional development approach in which senior members of the organisation are responsible for assisting new members in their career growth, improving their competence, developing confidence, socialising, and adapting to the work environment (Lin et al., 2018). The type of knowledge passed on and assistance rendered is implicit, making it a commodity whose value is unknown (Majiros, 2013). It, therefore, cannot be bartered but paid back with socio-emotional rewards. Tacit knowledge is gained through

experiences in the hospital (Yoo et al., 2019). This means those with more years of experience become the mentors. Because the hospital environment is characterised by individuals at different levels of experience and skill sets, this determines the value attached to this type of knowledge and support that mentors offer (Majiros, 2013). In addition, the socio-political context in which mentoring occurs impacts the mentor-mentee relationship. For example, the government funds health care, the community organisation that advocates the quality of care for patients, the nursing education providers, and the nursing professional bodies. This makes mentoring a social exchange relationship between the mentor and mentee in their larger context.

Upon graduation, the novice has the basic skills to become a nurse however may lack the confidence to practice these skills and adapt well in a complex clinical environment. Entering a mentoring relationship allows for support from a senior nurse by providing mentoring functions (Jakubik et al., 2017). The mentee returns this favour by being loyal and respectful in admiration of the mentor. The mentor and mentee subconsciously evaluate the benefits and costs of entering a mentoring relationship against available alternatives (Eby, 2007). The dependence of the novice on the senior nurses and their ability to reciprocate benefits builds trust (Yoo et al., 2019) that sustains the mentoring relationship into a long-term relationship. However, personality mismatch, partner unwillingness, and communication skills affect the relationship quality between the mentor and mentee (Eby, 2007). Social exchange theory has been used in studying mentoring relationships (Eby et al., 2008; Ensher & Murphy, 2011).

4.5.3 The organisational support theory

The organisational support theory traces its roots in social exchange theory. It evaluates the interaction of the individuals—the mentor and mentee—and the organisation in which they work. In the organisational support theory, the organisation is viewed as an individual in a relationship with the employee (Eisenberger & Stinglhamber, 2011). Aside from the financial contracts, the employer must reward employees' efforts. Employees invest time and effort into the organisation, which is, in turn, rewarded by acknowledging these efforts through recognition, esteem, and approval (Eisenberger & Stinglhamber, 2011). The employee returns the favour to the organisation by committing more time and effort, and the opposite can be rewarded with negative reciprocity (Cropanzano & Mitchell, 2005). In this reciprocal relationship with an organisation, both parties have rewards and benefits. As Individuals work in an organisation, their perception of organisation support depends on their belief that the

support provided is voluntary and aimed at bettering their well-being (Eisenberger et al., 1986). Due to the reciprocal nature of the relationship, perceived organisational support can have consequences for the employee and the organisation. Perceived organisational support is rated as good if the organisation is independent that is capable of exerting its influence without coercion from external forces like unions.

Furthermore, the organisational support is given voluntarily and not pressured; it is spontaneous and not premeditated; reliable, predictable, and dependable (Eisenberger & Stinglhamber, 2011). Organisation support is also viewed through the high-ranking members of the organisation like the executive management (Eisenberger & Stinglhamber, 2011). Most importantly, perceived organisational support reflects resources available for employees to expend in their routine duties (Eisenberger & Stinglhamber, 2011). Perceived organisational support is influenced by the employees' perception that the support provided by the organisation is for the well-being of its employees.

The organisational support theory applied to mentoring programs for hospital nurses

The mentor and mentee work in the context of their organisation. There needs to be a high level of perceived organisation support for the mentoring relationship in a formal mentoring program sponsored by the organisation (Park et al., 2016). The organisation supports the mentee by providing a favourable practice environment for the mentee to interact with the mentor and socialize with other colleagues. Organisation also supports the mentor with resources and training programs to mentor and socio-emotional rewards. The employees—mentees, and mentors—return to the organisation the affective commitment (Astuty & Udin, 2020; Eisenberger et al., 1986) which translates into low turnover and better patient care (Liu et al., 2018; Perreira et al., 2018).

4.5.4 The reasons for combining the three theories to inform the present study.

Issues associated with the effective mentoring program in a triad relationship among the mentee, the mentor, and the organisation are complex and derived from each party involved and the interactions of these parties. However, most previous studies have only applied theories or frameworks to address some of these issues. Based on the comprehensive analysis of theories or frameworks applied to studies in mentoring programs, this present study has selected three theories, including the Self-efficacy theory, the social exchange theory, and the organisational support theory, to overcome the limitations in the theoretical

perspective of mentoring programs for hospital nurses. Figure 3.1 illuminates the combination of the three theories. Detailed discussions regarding the reasons for combining the three theories are presented in the following sections below.

Social exchange theory is criticized for being too general and open to misinterpretation (Mitchell et al., 2012). Adding the social exchange theory and the organisational support theory will enable the researcher to emphasise the study context in hospitals in a health care system. This innovative application of the relevant theories will also enable the researcher to generate comprehensive constructs of mentoring programs for hospital nurses to understand what is exchanged and what works in the mentoring relationship.

The mentor and mentee enter a social exchange relationship supported by the organisation. This mentoring relationship aims to help the mentee adapt to the clinical environment and socialize with others (Hoover et al., 2020). The organisation supports this goal by providing a platform to build a social exchange relationship through a formal mentoring program (Goodyear & Goodyear, 2018; Lavoie-Tremblay et al., 2020). The organisation provides sponsorship, resources, and coordination for mentoring (Giacumo et al., 2020). Coordination of mentoring involves a dedicated staff who is concerned with the smooth running of the program (Giacumo et al., 2020). Some of the responsibilities of the mentoring coordinator include mentor-mentee matching, monitoring and evaluation, conflict resolution, and supporting the mentor in executing their responsibilities (Hameed et al., 2017; Polley et al., 2020). For the organisation to enable these functions, the coordinator is supported with resources such as technological hard and software, training facilities, and physical resources (Giacumo et al., 2020). In addition, the organisation provides rewards and compensation for those participating in the mentoring program (Clark & Casey, 2016). This support is vital for the successful transition of the nurse from a graduate to a fully functioning and independent nurse.

Novice nurses engaging in mentoring can oscillate between dysfunctional and high-quality relationships with negative or positive consequences (Ragins, 2016). Positive outcomes include competence, improved confidence, and socialization with colleagues (Eliades et al., 2016; Lin et al., 2018) while negative consequences include mentee feeling neglected, mentee, being overly dependent on the mentor, job dissatisfaction or personal accomplishments being accredited to others (Burgess et al., 2018; Eby et al., 2000). In order to realise these outcomes, the mentee presents to the mentoring relationship willingness to be

mentored, ability to be mentored, and their characteristics. Personality and learning styles are some of the most studied attributes affecting a mentor-mentee exchange relationship. With no one preferred personality or learning style, these attributes provide a foundation for supporting the mentee (Crew, 2016). Furthermore, mentee self-efficacy plays an important role in achieving their goal of adaptation to the clinical environment. Mentors have a responsibility to build the self-efficacy of the mentee.

Through role modelling and personal and career functions, mentors can tap into their tacit knowledge and provide opportunities for the mentee to build their self-efficacy. Although this will consume a great deal of their time and effort in their practice environment (Clark & Casey, 2016), the ultimate gain for the mentor will be feelings of generativity, having contributed to the existence and survival of the nursing profession (Burgess et al., 2018). The benefits for the mentor have implications for the practice environment.

A positive practice environment in which new nurses thrive, and senior nurses are celebrated is born from the mentoring relationship. Other positive outcomes include reduced turnover, increased retention, better quality patient care, and increased recruitment (Chen & Lou, 2014). In the opposite end of the relationship does not work out, there will be increased absenteeism, the new nurse will leave their jobs due to failure to adapt, and a negative work environment characterized by bullying and horizontal violence (Hartin et al., 2020; Tuckett et al., 2015). Holistically analysing the triad mentoring relationship requires considering the constructs contributing to the roles, benefits, and negative consequences of each party participating in the relationship.

4.6 Chapter summary

This chapter presented the theoretical framework to study the possibility of mentoring nurses and midwives in hospital settings in Uganda. This framework enables the view of mentorship in its totality to enable a formal mentoring framework for Uganda's nursing/midwifery workforce. Nurses, Midwives, and the organisation enter a social exchange relationship. The foundation of this relationship is built on trust based on the reciprocating of benefits with rewards among the stakeholders. The perception of these benefits and rewards, which should outweigh the costs and alternative choices, sustains the interaction into a long-term relationship.

The goal of the mentoring relationship is to help the novice nurse adapt to the clinical environment and socialize in the organisation and nursing profession as a whole. The ability to do this depends on the efficacy expectations of the novice nurse, as explained by the self-efficacy theory. Therefore, the senior nurse's role is to build the mentee's self-efficacy. The organisation supports this developmental relationship through its commitment to sponsorship and resources. The government, the community of patients, educators, and professional bodies affect this relationship directly and indirectly. Therefore, the social exchange, self-efficacy, and organisation support theories provide the framework for studying mentoring for hospital nurses and midwives in Uganda.

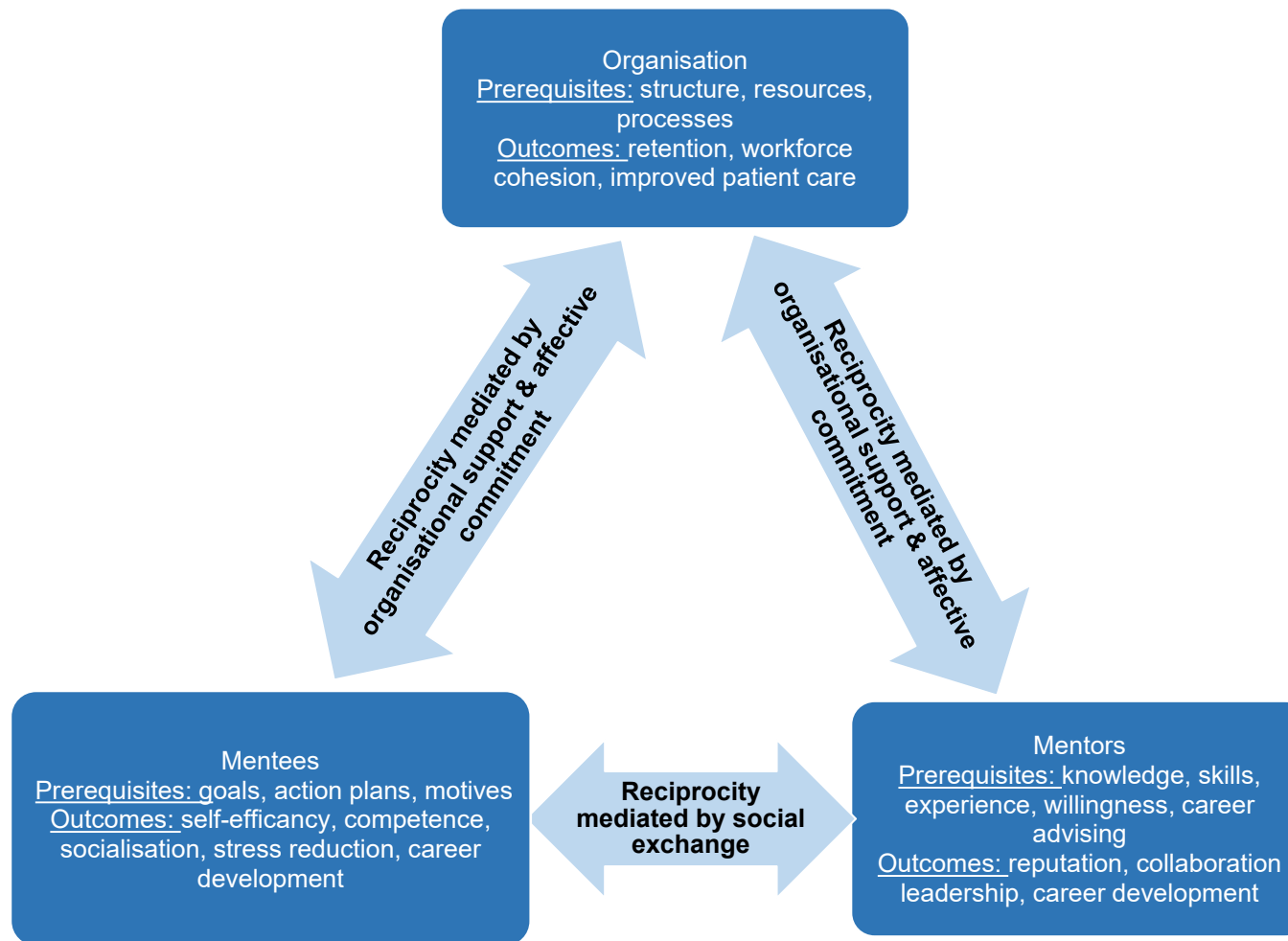


Figure 4.1 the diagrammatic representation of the theoretical framework

CHAPTER 5: PHILOSOPHY AND METHODOLOGY

5.1 Chapter introduction

This chapter provides insight into the underlying philosophy that shaped the study. It delves into the ontological, epistemological, and methodological perspectives adopted by the researcher. Additionally, the chapter highlights the pragmatic paradigm chosen to address the research questions and aims of the project. The inclusion of a mixed methods study design is also discussed, which aligns with the pragmatic paradigm's principles and enhances the comprehensive exploration of the research topic.

5.2 Research aim and objectives

The aim of the study was to characterise mentoring for hospital nurses and midwives in Uganda.

The specific objectives of the study were:

1. To determine the key mentoring dimensions that exist in the nursing and midwifery workforce in hospital settings in Uganda.
2. To determine the factors that affect mentoring dimensions for the nursing and midwifery workforce in hospital settings in Uganda.
3. To explain nurses' perceptions and expectations of nurses and midwives with mentoring in hospital settings in Uganda.

5.3 The philosophy

Adopting a philosophical stance for a research project is recommended for scholars. The discourse on philosophical frameworks has been based on paradigms. The variety of meanings attached to paradigms and Morgan (2007) groups them into four. The first definition conceptualises paradigms as being worldviews. The first definition conceptualises paradigms as being worldviews. Paradigm is viewed as assumptions, beliefs, and values that guide inquiry within a discipline (Guba, 1989). The researcher's worldview dictates what is important to study and therefore chooses the appropriate ways to study it. For example, there are nurses in the nursing discipline concerned with generating theories and those concerned with changes in nursing practice. The second definition deals with a paradigm as an

epistemological stance (Morgan, 2007). In this definition, researchers are concerned with what constitutes knowledge and the different ways of knowing. The researcher is concerned with coherence between the truth, knowledge of the truth, and the ways of being aware of the existence of the truth. The third definition of the paradigm is concerned with common beliefs that characterise the discipline (Morgan, 2007). The particular discipline, for example, nursing, determines the research that is important to that discipline and prescribes how to carry out that research. An example is that Munhall (1982) demonstrates that nursing is a humanistic discipline in which human beings are free—that is, they are an active entity in the care capable of making decisions that affect them. The fourth definition is paradigms as models providing guidelines for inquiry within a discipline (Morgan, 2007).

Philosophical frameworks based on the epistemological definition of the paradigm have evolved from positivism to dualism to pragmatism and critical realism (Mackenzie & Knipe, 2006). The era of positivism traces its roots through the natural sciences—naturalism posits that reality or truth, in this case, exists without the influence of the context and is devoid of emotions. It exists whether we are aware of it or not. Reality exists governed by perpetual natural laws (Guba, 1989). In the social world, truth or behaviour, for that matter, is governed by social laws of cause and effect (Corry et al., 2019). Social laws arise when events are instantly and constantly followed by another event (Corry et al., 2019). Positivists believe that social actors can observe, explain, and predict phenomena (Corry et al., 2019). Therefore, the truth can be studied empirically through the senses of social actors; hence there is only one true reality that is generalisable, and in order to discover this reality, the researcher does so in a controlled environment to eliminate the influence of researcher and contextual biases (Guba, 1989). Therefore, this paradigm allows the researcher to study the social world objectively, constructing knowledge based on theory building from the generalizable parts to the whole, which is the basis of positivism (Guba, 1989). The post-positivism era introduces the principle of falsification. Post-positivists believe that reality cannot be absolutely true but can be obsoletely false (Weaver & Olson, 2006). The researchers' study of the phenomenon is based on a hypothesis that predicts the nature of the cause and effect based on a theory. The overall aim of the researcher is to falsify the hypothesis derived from a theory (Corry et al., 2019). This makes the inquiry process one that is deductive. In other words, social laws are not definite and can be falsified instead of verified, falsified in time and context (Guba & Lincoln, 1982). Findings in the social world

can be false today with the possibility of not being false in the future (Weaver & Olson, 2006), making scientific knowledge indefinite with the potential for falsification in another future experiment (Corry et al., 2019). Post-positivism rejects the positivist whole reliance on empiricism and introduces theory into the research process, making the researcher a creative thinker, not a passive observer. The researcher has decisions to make about the focus and the approach and methods of the research. Post-positivism acknowledges the limitations that can arise from the senses of the researcher (Guba, 1989). Even when reality exists, the researcher cannot uncover all of it. Positivism and post-positivism have been labelled with several names: rationalistic (Guba & Lincoln, 1982) and scientific method (Munhall, 1982), both of which describe something similar. The criticism of the scientific paradigm arose from what others felt was the incompatibility of its assumptions with the social world. For example, the controlled laboratory experimental mode of inquiry was impractical and unethical in the science of the social world (Lincoln et al., 2011). Furthermore, the one true reality did not fit well with social phenomena. These arguments led to the rise of constructivism.

With constructivists, reality in the social world was not absolute in every sense; it was tacit and multiple. Reality existed in people's minds (Guba & Lincoln, 1982). Therefore, there existed as many realities as the people in the social world. Truth or behaviour is discovered based on the meaning ascribed to it and the motives of the active social actors (Corry et al., 2019). The tangible reality of the scientific paradigm was not more important than the meaning that individuals ascribed to it (Guba & Lincoln, 1982). The actions or behaviour of social actors were by choice and not by social laws (Corry et al., 2019). This made the goal of inquiry in constructivist research to interpret, understand, and reconstruct reality rather than predict, control, and generalise it (Lincoln et al., 2011). In order to understand the meaning of the actions of actors in the social world, constructivists have to use methodologies that use the interactions between the inquirer and the object to be studied (Guba & Lincoln, 1982). They produce findings with adequate descriptions for the next inquirer to make judgments on transferability (Guba & Lincoln, 1982). Furthermore, constructivists argue that the truth is grounded in the values and beliefs of the inquirer and subjects (Guba & Lincoln, 1982). The sources of these beliefs for the researcher are in the choice of paradigm, theory, and methods. Constructivists advocated for value-resonance with coherence in ontological, epistemological, and methodological stances giving rise to a dualistic paradigm.

The dualism created polarity between paradigms (Biesta, 2010; Morgan, 2014). Acceptance of one paradigm automatically rejects the other paradigms (Corry et al., 2019). The argument in this was that for an inquiry to generate meaningful findings, the discipline dictated the type of questions, how they should be answered, and the best ways to approach the inquiry process (Grix, 2002). The dualistic paradigm was about the mind versus matter—they versus us, making the two sides incommensurate with dominance, according to the scientific inquiry (Morgan, 2007). The incompatibility is based on the thought that each paradigm has different questions to be resolved regarding the nature of reality and truth making it impossible to combine paradigm The incompatibility is based on the thought that each paradigm has different questions to be resolved regarding the nature of reality and truth, making it impossible to combine paradigms (Sankey, 1993). The perceived incompatibility creates an illusion that the knowledge produced in either paradigm was also incommensurate. However, critics argue that there are no limits to understanding and using the knowledge generated through a different paradigm from your field/discipline. This further blur the boundaries between the paradigms (Morgan, 2007). Instead, they propose a pragmatic approach that allows communication between two research approaches (Morgan, 2007). The argument is that pragmatism focuses on shared understanding between researchers of different paradigms and the link between theory and practice (Morgan, 2007).

Pragmatism's core concerns the practical implications of the researcher's beliefs (Morgan, 2007). In other words, what the researcher does with the beliefs (Biesta, 2009). Furthermore, pragmatism rejects the top-down approach in metaphysics or the dualistic paradigm. The starting point is a methodology that links abstract beliefs of studying reality and methods used to generate knowledge (Morgan, 2007). Pragmatism advocates for reflexivity in which the researcher, influenced by their history, culture, and social background, choose what to study and how to study it (Morgan, 2007).



Pragmatism has three defining characteristics that differentiate it from post-positivism and constructivism. Firstly, rather than the unidirectional movement of the researcher between theory and data, pragmatists acknowledge that this is impractical; real research requires the researcher to move back and forth between the data and theory in an abductive manner (Morgan, 2007). Abduction is also present in using results from previous studies to inform the

inquiry process (Morgan, 2007), for example, using results that were deductively generated from a quantitative project to inform the process in the qualitative inquiry that seeks to generate a theory inductively. Secondly, pragmatism acknowledges intersubjectivity — reality as it is and social actors' interpretation of reality. This intersubjectivity allows the researcher to reflect on the consensus and conflict produced by the two differing beliefs (Morgan, 2007). Thirdly pragmatism focuses on the usability of the knowledge generated instead of limiting knowledge to the abstract differences between paradigms—transferability of findings (Morgan, 2007). For these strengths, this study will engage the pragmatism philosophy as underpinned by John Dewey.

5.3.1 Dewey's Pragmatic theory of truth and reality

Dewey's discussion of reality shifts from dualism and prefers empirical pluralism (Dewey, 1917). In these, Dewey argues that every numerical/ physical event has a sensory perception and response to it. Dewey saw it impractical to separate these two entities while they are a description of the same phenomenon as he gives an example:

"Smoke is numerically different from fire, has (or may have) a different locus in space, exists at a different time, etc. But it is not inherently representative of fire, although we learn to use it as sign or evidence or representation of fire. This sort of physical numerical duality is literally that which I find figuring in all knowledge. And as I have already said, there is always more than duality. The smoke affects my nostrils— there is a smell; my eyes—there is a sight ... A whole series of physical effects is found in every case of the happening of sensory responses" (Dewey, 1917, pp. 492-493).

In his example, according to Dewey, there is no epistemological dualism or monism; rather, pluralism that is multiple realities. Dewey argues for the contextual nature of reality, arguing that things are what they are as experienced. Everyone experiences the same phenomenon/reality differently. Dewey emphasises that things are not what they are known to be. Reality will vary depending on experience. This differs from the metaphysical paradigm that dictates that reality is what the knower finds it to be (Dewey, 1905).

"If it is a horse which is to be described....which is to be defined, then must the horse-trader, or the jockey, or the timid family man who wants a 'safe driver,' or the zoologist or the palaeontologist tell us what the horse is which is experienced. If these accounts turn out different in some respects, as well as congruous in others, this is no reason for assuming the content of one to be exclusively 'real,' and that of others to be 'phenomenal'; for each account of what is experienced will manifest that it is the account of the horse- dealer, or of the zoologist, etc., and hence will give the conditions requisite for understanding the differences as well as the agreements of the various accounts" (Dewey, 1905, pp. 393-394).

The interaction of the organism and their environment is what Dewey calls experience (Dewey, 1941). The subjective being constantly interacts with the objective environment, arguing that subjectivity and objectivity should not be separated. Dewey further explains that subjectivity on its own is pathological and objectivity on its own is meaningless (Dewey, 1941). If reality is multiple, then what counts as knowledge and truth? To Dewey, knowledge is an outcome of inquiry. The trueness or falsity of the outcome is based on the nature of the process of inquiry.

“The distinction between true and false conclusions is determined by the character of the operational procedures through which propositions about data and propositions about inferential elements (meanings, ideas, hypotheses) are instituted” (Dewey, 1941, p. 176).

However, Dewey avoids using the word truth, henceforth preferring to call the outcomes of any inquiry warranted assertions, arguing that the outcomes of inquiry are not absolute. Dewey acknowledges that these outcomes can be transferred to another situation with a similar context, they can be the same outcomes in future inquiry, but that does not make them the absolute truth. Taking us back to the question of at what point does inquiry begin.

The subject-matter of inquiry arises from indeterminate situations that arise when existing theories become unsuitable to answer situations in the present. Indeterminate situations arise an imbalance between the organism and their environment. This imbalance is not in thought but in matter with physical signs of imbalance. Since human beings are in constant interaction with their environment, they often encounter indeterminate situations (Dewey, 1941). These situations may be determinate in form but indeterminate in significance — pragmatism.

These problematic situations are a source of inquiry and control the entire inquiry process. From existing theories, hypotheses are formed, upon which scientific studies are done. The hypotheses must satisfy three properties: The hypothesis must be based on a theory with verifiable existence, it must account for alternate hypotheses formed from the same theory, and it must account for arguments based on other theories (Dewey, 1939). These hypotheses, Dewey calls propositions (Dewey, 1941). Only when the proposition satisfies the three conditions do the outcomes of the inquiry be plausible (Dewey, 1939). These propositions are checked and tested through scientific experimentation, generating observation data. This data is different in form from the data used in developing existing theories (Dewey, 1941). The

conditions under which the data is generated ought to vary if they are to supplement the existing theories. Once again, Dewey emphasises that outcomes of inquiry are warranted assertions that reflect the conditions of inquiry. These new warranted assertions can be confirmed or falsified in the future under different conditions of experimentation or observation. Hence outcomes of inquiry are not absolute truths (Dewey, 1941). From Dewey's argument, propositions are necessary to arrive at warranted assertions; these propositions do not form part of the outcome of the inquiry; that is, propositions are instrumental to the outcome of an inquiry.

The outcomes of inquiry are a product of the properties of the process of inquiry. Therefore, the knowledge generated from inquiry might differ if another method of inquiry is used. Dewey emphasises that the new outcomes do not become more right than the outcomes of the previous inquiry (Dewey, 1939); rather, both outcomes count as the knowledge that differed in the inquiry process and conditions; hence Dewey prefers the term warranted assertions. Through examination of the methods (means) used in the inquiry process and the conclusions(consequences), we find reasons for the success or failure of certain methods (Dewey, 1939). Dewey's pragmatism emphasises the rationality of means and consequences rather than static first principles in the metaphysics paradigm. Dewey urges always to have the end in mind when designing a process of inquiry:

"It is reasonable to search for and select the means that will, with the maximum probability, yield the consequences which are intended" (Dewey, 1939, p. 10).

By way of habits, researchers can determine the means to intended consequences. It becomes a habit when a particular method continually under different experimental conditions produces desirable consequences. Habits then become accepted rules of logic. Habits help us identify the appropriate methods for desirable consequences until such a time when we find grounds to challenge them hence setting off a new process of inquiry (Dewey, 1939).

John Dewey was an American philosopher with a variant of logic which he called experimental logic. He criticises the dualistic tendencies that separate social, emotional, and contextual knowledge from factual knowledge (Dewey, 1916). To Dewey, knowledge is born out of experience, particularly cognitional experience. To Dewey, the objective characteristics of existence and subjective ideas are both important in our construction of knowledge. Dewey criticised the idealistic logic for emphasising the objects of knowledge. This ignored the

subjective ideas such as intuition, emotions, and social and cultural context as non-analytical and hence irrelevant and non-existent. Ignoring these contextual situations in which knowledge was derived leads to a wrong conclusion of one true reality (Dewey, 1916). In other words, our knowledge or experience of something does not mean it is the only one true reality. Rather knowledge gives us characteristics of what is in existence; as he quotes, “*Data are not objects but means, instrumentalities of knowledge; things by which we know rather than things known*” (Dewey, 1916, p. 43). Not all experience leads to knowledge, but cognitive experience does. Reflection is what makes an experience a cognitive one; according to Dewey, the process of inquiry starts and ends with reflection (thinking). The process of reflection is continuous, moving between the data and ideas to find meaning. Inquiry comprises objective reality (facts) and subjective ideas, both of which are important in creating a unified experience (Dewey, 1916). Both facts and ideas have a role to play at each stage of the process of inquiry. According to Dewey, there are four stages in the process of scientific inquiry (see Table 5.1).

In the first phase, Dewey argues that experience gives rise to thought. There are two types of experiences; aesthetic experiences, which are made of facts that we take for granted (never questioned), such as the rivers, and the trees (Dewey, 1916). Through reflection, an individual identifies inconsistencies in these aesthetic experiences, for example, when we need to cross to the other side of the river or when a tree falls, and we cannot drive across the road. These inconsistencies set forth a process of inquiry for which an individual must find solutions (Dewey, 1916). Conflicts within experience give rise to thought. The goal of thought is to unify the conflicting contents of experience. Reflection, or the thought process, although subjective, is critical in creating a unified experience of our environment. Therefore, this initial phase of inquiry comprises both the facts that are unquestioned and the ideas that are the doubtful elements of experience (Dewey, 1916).

Dewey's second phase, the empiric stage, involves collecting crude and raw data (facts). The inquirer must consciously choose which data to collect and the kind of data he does not require in the scientific inquiry. The reflection also impacts the third phase of the inquiry, the speculative stage. The inquirer reflects upon the raw data and tries to classify the data, find distinctions, make hypotheses, and calculated guesses (Dewey, 1916). The final stage, characterised by new meanings, is only made possible by way of reflection. The inquirer uses ideatum (ideas) and datum (data, facts) to create meaning. Without the ideatum, data is crude

and meaningless. At this stage is the final integration of ideas and data to create new experiences. Dewey, at the completion of the inquiry process, emphasises that both datum and ideatum are instrumental in constructing experience (Dewey, 1916). This outcome of the inquiry is the new meaning that the next inquirer can criticise in a different environment or context. This, according to Dewey, makes the process of inquiry cyclical and not linear, as is the argument in idealistic logic. Hence the discovered new meaning is not absolute but relative and methodological. To Dewey, the discussion of one true reality in dualistic paradigms is limited in (1) new meanings are situational/contextual —real facts exist together with their mental constructions, and (2) new meanings form a solution not to an actual problem, but one created by the knower. Therefore, data and ideatum are not one true existence but modes of existence, with data constituting *the given existence* and ideatum the possible *inferred existence* (Dewey, 1916, p. 139). With the given data, the inquirer can make inferences. The inferences are, therefore, a way by which the inquirer gets to know the truth, i.e., inferences are means to the truth, not the truth themselves.

Table 5.1 the role of reflection in the process of inquiry.

Stages of inquiry	Process of inquiry	Role of reflection
Stage 1	Identifying the problem	Critical thinking, inquirer criticises existing reality identifying inconsistencies
Stage 2	Empirical stage	Inquirer reflects on relevant data versus redundant data
Stage 3	Speculative stage	Inquirer making hypotheses i.e., making distinctions and classifications
Stage 4	Meaning	Integration of facts and ideas to find meaning i.e., new experiences

5.3.2 Pragmatism and mixed methods in this study

Dewey's pragmatism acknowledges that the research process is messy and not linear. There is a lot of back-and-forth movement in the process of inquiry requiring the researcher to be reflective. Pragmatism also recognises that reality is as important as our understanding of it. Therefore, both objective and subjective experiences influence knowledge. The truth that results from the process of inquiry is grounded in context; therefore, it is not absolute reality but warranted assertions. In this study, the researcher determined the study problem as explained in chapter one and chose to study the phenomenon of mentoring both objectively and subjectively. The study determined characterised mentoring and perceived consequences and examined the role of the organisational in future formal mentoring programs. The next section describes the methodology, design, and methods that informed the study.

5.4 Methodology

5.4.1 Design

This study used a mixed methods methodology that combined quantitative and qualitative approaches (Dawadi et al., 2021). The aim of using this methodology was to study mentoring among nurses and midwives working in hospitals in Uganda. The study was thus informed by quantitative and qualitative designs, methods, and analyses before integrating the findings into a common output. This methodology was chosen based on the need to corroborate the findings and gain a deeper understanding of the mentoring phenomenon (Creswell, 2021). Mixed methods research allowed for the use of multiple lines of inquiry. The multiple lines of inquiry granted the researcher access to information that would be inaccessible using one research design. Quantitative results described the relationship between mentoring dimensions, but this alone did not have meaning and context to these relationships. Mixed methods inquiry allowed the different designs to create synergy and offset the weaknesses of each independent design (Creswell, 2021) giving a complete picture of the phenomenon (Dawadi et al., 2021; Molina-Azorín, 2011). Therefore, the decision to address the research question using various methods was arrived at before the inquiry process, making this a fixed mixed methods design (Creswell, 2021).

This study used a sequential mixed design. Tashakkori and colleagues define this design as one in which the quantitative and qualitative designs are utilised in a chronological manner (Tashakkori et al., 2020). Sequential designs are applied when the researcher needs to explore and/or explain results from one design. This study used quantitative methods to explore mentoring dimensions among hospital nurses and midwives. The qualitative design was used to explain the results obtained through the quantitative design. The advantage of using this design was complementarity and initiation (Dawadi et al., 2021) — expanding the breadth of knowledge regarding mentoring. In Creswell's typology, this is an explanatory sequential design in which results of the quantitative results inform the design of qualitative results. However, Creswell (2021) recommends this design to researchers aware of the variables to be studied in the quantitative phase of the study. For this study, to identify the variables to inform the quantitative phase, the researcher undertook a systematic review and thorough examination of theories used in mentoring studies. All the phases of the study were given equal priority. The mix of the designs is as shown in the formula below:

5.4.2 Integration

The main goal of adopting a mixed methods methodology was an opportunity to integrate different designs within one study. Integration involves combining various data components and strategies within a mixed methods study to achieve an outcome that is greater than the sum of its parts (Bazeley, 2012; Guetterman et al., 2023). Integration within a Mixed Methods study can occur on four different occasions: design, methods of collecting data, interpretation of findings, and reporting of study findings (Fetters & Tajima, 2022). This study's integration occurred at three points, as shown in Figure 5.1.

1. *Connecting*: Fetters and colleagues explained that connecting as an integrative strategy is said to have occurred if one data type informs the sampling frame used in another dataset (Fetters & Molina-Azorin, 2017). This study analysed data from the quantitative survey for differences among groups on the mentoring dimensions. Moreover, factors of importance to mentoring were also analysed. Sampling was based on demographic characteristics ensuring both early and late-career nurses were included in the qualitative phase of the study.
2. *A staged approach* to integration: Staged integration is said to have occurred when different data elements are collected, analysed, and published separately (Fetters et al., 2013; Fetters & Tajima, 2022). Data collected for the quantitative phase of the study was collected first and analysed written as a separate chapter of the thesis. Secondly, data from the qualitative phase of the study was collected, analysed, and written as a separate chapter of the thesis.
3. *Meta-inferences*: The researcher then analysed both datasets looking for patterns that provide answers to the research questions to provide a holistic context to mentoring in the hospitals in Uganda, analysing for patterns from the results of the quantitative and qualitative findings allowed for fine-tuned comparisons to be made (Bazeley, 2009; Hirose & Creswell, 2022). The goal was to identify the important mentoring dimensions and explain the context in which mentoring occurs for nurses and midwives in hospitals. Although the purpose of using a mixed methods design was an extended understanding of mentoring in a context of Uganda, confirmatory and discordant findings were also found with implication for practice and future research (Fetters et al., 2013). The meta-

inferences have been presented in a joint display, and a narrative discussion of the integrated findings provided (Bazeley, 2009; Fetters et al., 2013; Hirose & Creswell, 2022).

5.4.3 Quality management in mixed methods

Quality management for mixed methods studies concerns the degree to which meta-inferences drawn from integrating quantitative results and qualitative findings are credible (Tashakkori et al., 2020). To ensure credibility in integration, firstly, each arm of the Mixed Methods study ought to meet its standards of rigor. For example, the quantitative phase should demonstrate acceptable reliability and validity of instruments used to measure the phenomenon. The quality of inferences for the quantitative phase of the study is demonstrated in Chapter 6, section 6.10, while the trustworthiness and rigor for the qualitative arm of the study are shown in Chapter 8, section 8.9. Furthermore, the credibility of meta-inferences will be achieved through the following:

1. Integrative efficacy: This is concerned with generating mixed-method inferences grounded in data from each strand of the MM study (Tashakkori et al., 2020). Meta-inferences generated in this study showed consistent findings from both quantitative and qualitative arms and explained any inconsistencies that arose, as shown in Chapter 11.
2. Integrative correspondence: This is the ability of the meta-inferences to answer the research question for which they were designed (Tashakkori et al., 2020). In this study, the purpose was to characterise with context mentoring dimensions of nurses and midwives working in hospitals, as shown in Chapter 11.

The researcher demonstrated rigor in the respective phases of the study and established meta-inferences of good efficacy and correspondence during the entire study.

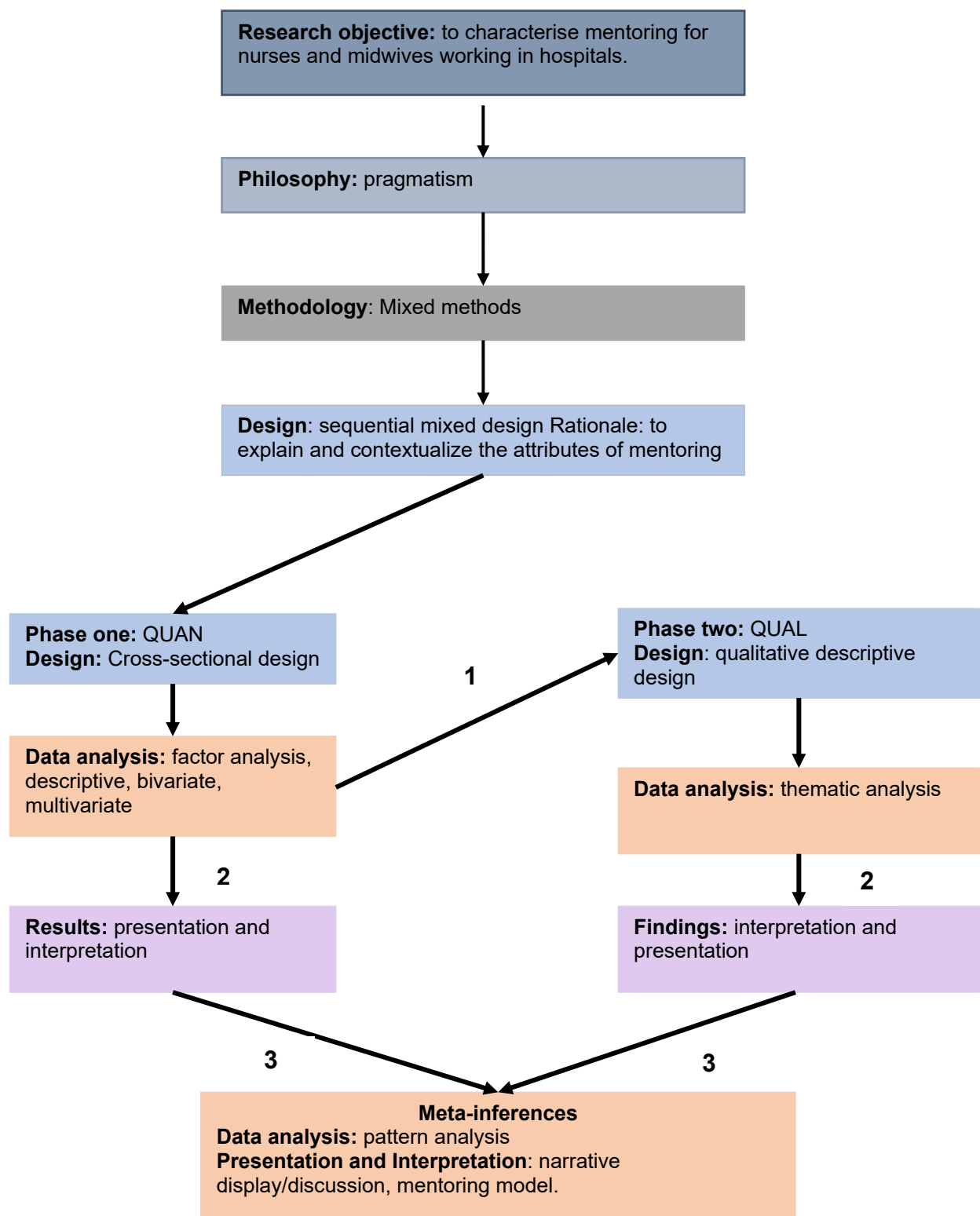


Figure 5.1 visual model for the implementation of mixed methods sequential design for mentoring for hospital nurses

5.4.4 Efforts to address potential limitations.

Several challenges have been identified using the sequential explanatory design; for example, time and resources (Creswell, 2021). The researcher started the study aware of this challenge and planned accordingly. Creswell & Creswell (2017) also acknowledge issues in securing ethics approval considering the qualitative phase cannot be clearly defined in advance. Ethics approvals for phases one and two were sought separately. Sampling issues have also been identified in the exploratory design due to the inability to define the qualitative sample in advance. To address this challenge, the quantitative study informed both the design and sampling of the qualitative phase. The final limitation is the threat to validity due to the lack of skill to conduct a mixed methods study (Creswell, 2021). The researcher had experience working on qualitative and quantitative projects before, attended several classes on using qualitative and quantitative methods, and was supervised by a team of qualified and experienced researchers.

5.5 Chapter summary

Informed by pragmatism, the aim of the two-phased sequential explanatory mixed methods design was to characterise mentoring for hospital nurses and midwives working in hospital settings in Uganda. The sequential explanatory design commenced with phase one; constituting of a quantitative design that identified the factors that affect mentoring dimensions. Findings from this phase informed the design and sampling of the qualitative phase that sought to understand the perspectives surrounding mentoring for nurses and midwives in hospital settings. The project was spread out in a phased manner to ease its implementation (Creswell & Creswell, 2017). The two phases were helpful in designing a model that is grounded in evidence.

CHAPTER 6: QUANTITATIVE PHASE METHODS

This chapter contains extracts from:

Kakyo, T.A., Xiao, L.D. & Chamberlain, D. (2023) Evaluating psychometric properties of three mentoring scales among nurses and midwives in hospital settings: A methodological study. *International Nursing Review*, 00, 1–11. <https://doi.org/10.1111/inr.12889>

6.1 Chapter Introduction

This chapter builds on previous chapter by presenting the design and methods used phase one of the mixed methods study. The main purpose of phase one of the study was to determine the mentoring experiences of nurses and midwives working in hospitals in Uganda and how they relate with workplace outcomes. This chapter presents study design, study population, sampling and sample size, study variable, data collection tools and procedures, data management and analysis.

6.2 Study design

The aim of the study was addressed using a cross-sectional study design. This study design allowed the researcher to collect data at a single point in time (Portney, 2020). Cross-sectional studies allow the researcher to study a phenomenon that has not been explored in a setting before. This study design also enables the researcher to analyse the relationship between variables (Polit & Beck, 2021).

6.3 Participants

The target population for this study was all nurses working in hospital settings in Uganda. However, due to cost, time, and feasibility reasons, this study aimed to obtain an accessible population. An accessible population comprises participants that meet the inclusion criteria and are available to participate in the study (Polit & Beck, 2021). For this study, the accessible population was the nurses working in hospital settings who met the inclusion criteria and consented to participate.

Inclusion criteria

Inclusion criteria define the characteristics of participants that make up the study population (Polit & Beck, 2021). This study included participants with the following characteristics:

- Nurses licenced to practice by the Uganda nurses and Midwives council to work in Uganda.
- Nurses working in clinical/hospital settings.

Exclusion criteria

The exclusion criteria identify participants who exhibit characteristics irrelevant to the study's objectives (Polit & Beck, 2021). This study excluded participants from nurses and midwives working in community, rehabilitation, and homecare settings.

6.4 Sample size

The study considered a 95% confidence interval that corresponded to a Z score of 1.96 for a two-tailed study, a 10% proportion of nurses/midwives scoring high on the willingness to participate in future mentoring programs (one of the outcome variables), and allowed for 5% margin of error. This generated a sample size of 138. The sample size was adjusted for the 52907 nurses in Uganda (World Health Organisation, 2020b), giving a sample size of 139. Given that it was a long survey, the researchers anticipated a 50% non-completion rate; hence, the sample size was increased to account for any missing data, bringing the desired sample size to 207. The study aimed to perform multivariate analyses for which the appropriate sample size depends on the strength of correlations and several factors (Tabachnick & Fidell, 2021). However, a sample that is 50 more than 8 times the number of variables in the study (Green, 1991) is considered suitable. The sample size for the multivariate analyses was based on the relational mentoring index since it is the scale with the most variables of 21 in the questionnaire for this study. Therefore, a sample size of 218 was required for multivariate analyses.

6.5 Sampling criteria

Sampling is a way of selecting the number of participants representative of the entire population (Polit & Beck, 2021; Thompson, 2012). Several methods have been identified in the literature. These have been categorised into two: probability sampling and non-probability sampling. Probability sampling encompasses all methods that grant participants an equal

chance to participate in the study, such as simple random sampling (Polit & Beck, 2021). Although this is the preferred method in literature, it is inapplicable in most nursing studies (Polit & Beck, 2021). Most nursing surveys use non-probability sampling.

Non-probability sampling consists of techniques in which sampling is based on ease of access to the population. Although convenient, the non-probability methods have the disadvantage of not generating a sample representative of the entire population. The advantage is that the researcher can select a sample that bears the phenomenon to be studied (Polit & Beck, 2021). In response to the COVID-19 pandemic management plans and travel restrictions, the non-probability methods were deemed appropriate to align with the prevailing circumstances. Hence, this study used non-probability sampling methods —convenience sampling. Convenience sampling involves selecting participants as they become available for the study (Portney, 2020). The study recruited participants that responded to the online survey links.

6.6 Study variables

Study variables are concepts that constitute the phenomenon under study (Botti & Endacott, 2008; Polit & Beck, 2021). There are two types of variables. First the independent variable which is a variable that impacts another variable (Polit & Beck, 2021). Second, the dependent variable represents the variable whose changes are attributed to the influence of another variable. In this study, the variables were as follows:

- Demographic variables: these included individual characteristics (such as age, gender, number of years as a nurse/midwife, registration status, highest level of qualification, nursing role), general self-efficacy, and social exchange orientation.
- Mentoring variables: previous training in mentoring, perceived cost of mentoring, negative mentoring experiences, positive mentoring experiences.
- Organisation variables: department of work, type of facility they worked for, and perceived organisation support.
- Dependent variables: intention to stay in the same organisation, intentions to advance career, willingness to participate in future formal mentoring programs.

6.7 Data collection tools

A survey questionnaire was used in this phase of the study. A questionnaire is a research instrument consisting of a series of questions (Polit & Beck, 2021). Survey questionnaires have an advantage of reaching a large population, especially if the participants have acceptable literacy levels (Boynton & Greenhalgh, 2004). Questionnaires are the most common tools for data collection for observation studies. The questionnaire for this study comprised seven sections, detailed below.

1. **Demographic characteristics:** The first part of the questionnaire included questions that depicted the demographic characteristics of the study population. Demographic characteristics have a key function in identifying the population of the study (Polit & Beck, 2021). Questions relating to variables such as age, gender, department for which they worked were included in this survey section. Literature has also shown that some demographic characteristics influence mentoring (Choi & Yu, 2022; Coventry & Hays, 2021). These demographic variables include professional experience and previous training in mentoring these were included in the survey. Other characteristics, such as level of qualification and type of professional registration —nurse or midwife- were included to determine whether a difference existed between groups for their mentoring experiences.
2. **Mentoring outcomes:** these were assessed with three questions. For turnover intentions were measured with one item “on a scale of 0 to 10, how likely are you to stay working for this hospital in the next 5years”. Intentions to advance career was measured by asking “on a scale of 0 to 10, how likely are you to advance you career in the next 5 years?” willingness to participate in future mentoring programs was measured by asking on a scale of 0 to 10, how likely are you to participate in a formal mentoring program?”
3. **Positive mentoring experiences:** these were measured using the Relational mentoring index (RMI). The relational mentoring functions measure the quality of relationship experienced by both the mentor and mentee (Ragins, 2012). Relational mentoring was determined by using 21-items from the Relational Mentoring Index measured on a 7-point scale (Ragins, 2012). The Relational mentoring index consists of six factors: personal learning and growth, inspiration, affirmation of selves, reliance on communal norms, shared influence and mutual respect, and relational trust and commitment

(Ragins, 2012).

4. Perceived cost of mentoring: this was determined by using a 13-items developed by Ragins and Scandura (1994). The tool was scored on a 7-point Likert scale. The greater the score the higher the perceived cost of mentoring.
5. Negative mentoring experiences: this was measured with 16-items adapted from the negative mentoring scale Eby and Allen (2002). These items constituted two subscales *lack of mentor expertise* and *mismatch between the dyad* measured on a 5-point Likert scale.
6. Social exchange orientation: this was measured using a questionnaire designed by (Yoshikawa et al., 2020). The tool consists of 20-items measuring negotiated, reciprocal and generalised exchange orientation. The items were measured on a 7-point Likert scale.
7. Perceived organisational support: Perceived organisational support (POS) was measured using the POS instrument (Eisenberger et al., 1986). The shorter version of the questionnaire consists of 8 items measured on 7-point Likert scale was used in this study.
8. Self-efficacy: General self-efficacy tool was used to measure participants self-efficacy. This study will use the new general self-efficacy scale (Schwarzer & Jerusalem, 1995). The tool consists of 10 items scored on a 4-point Likert scale.

6.8 Data collection procedure

Permission to use the data collection tools was obtained from the original authors (see appendix 8). For one scale, the General Self-efficacy, explicit permission was not required as the tool could be accessed from <https://www.psychtoolkit.org/survey-library/generalized-self-efficacy-gse.html>. Ethics approval was obtained from Flinders university Research Ethics Committee (Project no. 4525) and the AIDS Support Organisation TASO Research Ethics Committee in Uganda (project no. TASOREC/056/2021-UG-REC-009) see appendix 9. The data collection process coincided with covid19 pandemic management plans and travel restrictions. Therefore, a decision was made to use online methods of data collection to adhere to the restrictions. Data was collected via Qualtrics, an online data collection platform. The survey link inviting participants to take part in the study was shared on nursing and midwifery online platforms affiliated with professional associations and hospitals. These

platforms were mainly WhatsApp messenger groups. Participants were encouraged to share the survey link among colleagues. For participants with expressed difficulty in accessing the survey link were approached by a research assistant and accessed the survey using an electronic tablet. Some of the reasons for failure to access were based on the internet being expensive and difficulties accessing and manoeuvring the online survey.

Upon clicking on the survey link, participants were redirected to a participant information page that explained the benefits and risks of participating in the study, as well as instructions for withdrawal from the study. The page that followed consisted of consent statements that participants were required to check to indicate their willingness to participate in the study. Once participants had consented, they were able to access the survey.

Data was collected between June and October 2021 in three stages. The first data collection stage involved data regarding the validity of the questionnaires, the second stage of data collection was the main study, and the third stage was regarding the reliability of the questionnaire. Details of stage one and two are shown in section 6.11. Details of the survey questionnaire are shown appendix 10.

6.9 Data management and analysis

Data management

Data was exported from Qualtrics to SPSS version 27. Exporting data from Qualtrics tagged variables such as start time, stop time, and recorded data. Furthermore, the export captures cases that accessed the survey but did not attempt beyond the consent items. These unwanted variables were deleted. Cases in the dataset that did not answer questionnaire items were also deleted. Variables were re-coded to ease the analysis process.

The remaining dataset consisting of 303 participants representing a 64.2% completion rate, underwent preliminary analysis. Preliminary data analysis is done to obtain a general impression of the data. Preliminary analysis helps determine missing data and wrong entries (Polit & Beck, 2021). Item GSE-9, “*If I am face with a challenge, I can usually think of a solution,*” had the highest missing values at 7%. Overall missing values were 2.8%, about 39.3% had at least one missing value, and every variable had at least one missing value, as shown in Figure 6.1. Newman (2014) recommends maximum likelihood approaches to data imputation for missing data for instances when carrying out item-level analysis and using

persons' available data when conducting construct-level analysis. Therefore, to carry out the factor analysis, data were imputed using Expectation Maximization (Newman, 2014). The unimputed data was used to analyse the rest of the univariate, bivariate, and multivariate analyses.

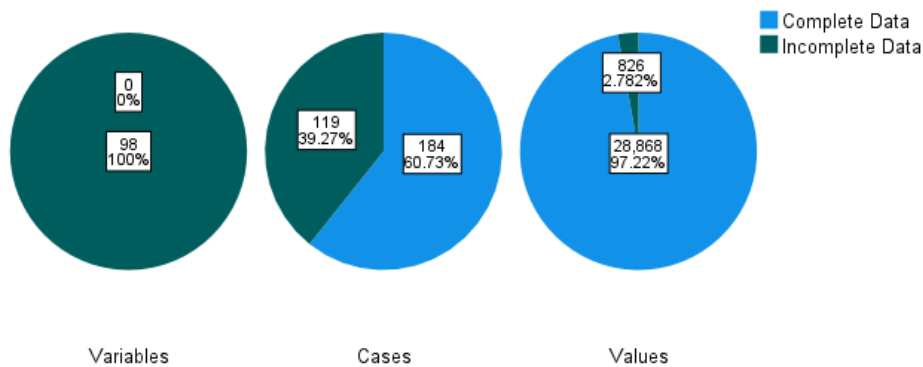


Figure 6.1 showing a summary of missing values.

Data analysis

Data analysis of quantitative study helps the researcher organise, integrate, interpret, and convey the results of the research (Polit & Beck, 2021). Data were analysed using the IBM SPSS Statistics for Windows, Version 27.0, and Hayes PROCESS Macro.

6.10 Quality management

Quality in a quantitative study focuses on controlling bias to make strong inferences about the data (Polit & Beck, 2021). Quality control is about improving the validity and reliability of the tools for the context in which the study will be carried out. To improve validity and reliability, a pilot study was carried out. Pilot was carried out in two phases. Firstly, experts review the questionnaire to assess and enhance its validity (see Section 6.10.1). Secondly, a test-retest method is used to evaluate and improve the reliability of the questionnaire (see Section 6.10.3.1). The construct validity of the scales was examined within the main study through preliminary analyses (see Section 6.10.2).

6.10.1 Content Validity of the instruments

Expert reviewers were invited to evaluate the questionnaire for appropriateness for the Ugandan context. They were asked to evaluate each item by allocating a score on a 4-point

scale: 1 = Not appropriate, 2 = Somewhat appropriate, 3 = Quite appropriate, 4 = Highly appropriate. The reviewers were also asked to provide qualitative feedback commenting on the any errors, comprehensiveness, ambiguity, and clarity of each item. Furthermore, reviewers were given the opportunity to comment on the questionnaire as whole paying attention to the participant instructions and general flow of the questionnaire.

At the end of round one of the experts' review survey, out of 12 participants invited to review the questionnaire, eleven (11) participants had responded. Data was exported from Qualtrics to SPSS version 27 for analysis. For each item in a particular scale, an Item Content Validity Index (I-CVI) was computed as the number of experts that gave a rating of 3 or 4 divided by the total number of experts (Polit & Beck, 2021). The I-CVI for each item and scale content validity index (S-CVI) are presented in the appendix. Each reviewer's data was explored for qualitative comments paying attention to items that had an I-CVI score of less than 0.80 (Polit & Beck, 2021). The main issues highlighted from round one were:

- The midwife was not explicit in the questionnaire.
- Categorical responses for age and years of experience were preferred.
- There was noticeable similarity between items in the same scale.
- Include questions on cost of mentoring for someone in a mentee role.
- Suggestion to include questions on career promotion and growth.
- Suggestion to include questions on whether mentoring should be voluntary of part of the job responsibilities; Whether mentoring should be rewarded.
- Typing errors, punctuations, and word choice.

Minor revisions were made to address the comments and the survey readministered to the experts. The items on the GSE scale all had a score above 0.80; therefore, this scale was not returned to the reviewers for round two. The second round of the expert review survey was done in July 2021. Ten of the 11 participants responded to the second review call. All the scales S-CVI improved to above 0.9 at round two as shown in appendix. The revised questionnaire was administered to participants to collect for test-retest reliability. The Item content validity index (I-CVI) for each item is presented in appendix 11 and S-CVI of the scales is shown in table 6.1 below.

Table 6.1 showing the scale content validity index for all instruments at round one and two.

No.	Scale	S-CVI at round one	S-CVI at round two
1	Perceived cost of mentoring	0.85	0.93
2	Negative mentoring experiences	0.90	0.93
3	Relational mentoring index	0.83	0.90

6.10.2 Construct validity

The aim of the phase of the study was about exploring mentoring experiences and perceptions and their impact on the work place outcomes. In this study, mentoring experiences and perceptions are theoretical constructs. Construct validity determines ability of a scale to measure theoretical constructs. This is because theoretical constructs cannot be directly measured (Portney, 2020). This study adapted existing scales to measure mentoring and performed statistical analyses to determine to their respective components. The adaptation of the PCM, NME and RMI scales to measure the experiences of mentoring of within the socio-cultural context of a developing country presents challenges. Firstly, within a cultural context, mentoring concepts may acquire diverse interpretations (Geber & Keane, 2017). These scales are in English and adapted for use in a country where English is a second language.

Consequently, the scales may carry different and diverse meanings to the original. Second, social context affects the mentoring relationship, organisational climate and greater society in which the stakeholders—the mentee, the mentor and the hospital—are situated (Kochan, 2013). Therefore, validation and evaluation of the scales that are used to measure the experiences of mentoring needed to engage those affected by the mentoring phenomenon.

One of the methods to determine underlying components of a theoretical construct is factor analysis (Portney, 2020). Factor analysis was performed to ensure effective inferences can be drawn from the data regarding mentoring (Polit & Beck, 2021). In this study, Exploratory factor analysis (EFA) was performed. EFA assumes no priori dimensions or components of a scale but aims to group variables together in a statistical analysis (Polit & Beck, 2021). Factor analysis involves linear combination of variables that form subsets of a scale (Tabachnick & Fidell, 2021). Steps in factor analysis include identifying the variables, extracting factors from the variables, rotating the factors to ensure ease of interpretation, interpreting the factors and finally establishing the construct validity and consistency of the factors (Polit & Lake, 2014).

This study used principal component analysis (PCA) for extraction of the factors and promax rotation to determine the underlying structure of the scales (Tabachnick & Fidell, 2021). Factors with eigenvalues greater than one and factor loading greater than 0.5 were retained (Polit & Beck, 2021). In determining the adequacy of the sample, the Kaiser-Meyer-Olkin (KMO) measure was noted, and Bartlett's Test of Sphericity was used to determine the adequacy of the correlation matrix (Tabachnick & Fidell, 2021). Factor analysis was performed for PCM, NME and RMI scales. The SEOS, POS and GSE scale were maintained as they were as they had undergone cross-cultural validation and had extensively been used in other setting where English was second language with results showing consistent underlying factor structure (Gyekye & Salminen, 2009; Schwarzer, 1999; Yoshikawa et al., 2020).

Factor analysis of the PCM scale

EFA was carried out in steps. In the initial EFA, the correlation matrix was evaluated for factorability and showed that the KMO measure of sampling adequacy was 0.830 and that Bartlett's test of sphericity was significant ($\chi^2=628.6$, $df=78$, $p<0.001$), returning a non-zero determinant of 0.120. These parameters support the suitability for PCA (Tabachnick & Fidell, 2021). PCA with promax rotation was performed for the 13 items. This extracted four factors with eigenvalues greater than one. One item was deleted because it had a cross-loading between two factors greater than 0.4 and EFA run again. Three items that had a factor loading of less than 0.5 were then deleted and the analysis was repeated. The final EFA analysis showed three factors: *risk to reputation*, *mentoring effort* and *nepotism* as shown in table 2.

Factor analysis of NME scale

The data were examined for normality and factorability. One item, '*My mentor and I have different work habits*', was deleted due to extreme skewness. The correlation matrix of the remaining 15 items showed that the KMO measure of sampling adequacy was 0.878 and that Bartlett's test of sphericity was significant ($\chi^2=1318.135$, $df=105$, $p<0.001$), returning a non-zero determinant of 0.012. These parameters indicated the suitability for PCA (Tabachnick & Fidell, 2021). The dataset was then subjected to PCA, which extracted two factors with eigenvalues greater than one. Promax rotation was then performed (Polit & Beck, 2021). Two items, '*My work strategies are different from my mentor's*' and '*My mentor and I have a different understanding of effective work performance*', were also deleted due to low factor loading of less than 0.5. The final analysis showing two factors consistent with the original

NME scale. The names of the factors were retained as *lack of mentor expertise* and *mismatch between the dyad*, which accounted for 48.5% of the variance (Table x).

Factor analysis of RMI scale

The dataset was examined for factorability. The correlation matrix of the 21 items showed that the KMO measure of sampling adequacy was 0.951 and that Bartlett's test of sphericity was significant ($\chi^2=3594.1$, $df=210$, $p<0.001$), indicating a non-zero determinant. These parameters support the suitability for PCA (Tabachnick & Fidell, 2021). The dataset was then subjected to PCA, which extracted two factors with eigenvalues greater than one. Promax rotation was then performed with a goal of 0.5 factor loading per item. Three items were removed from the analysis due to low loadings of less than 0.4. Item 16, '*My colleague/or supervisor and I respect and influence each other*', was conceptually related to factor two but loaded on factor one; therefore, it was also deleted. The final EFA showed two factors: *Individual Influence* and *Relational Quality*. These explained 55.7% of the variance (Table x).

Table 6.2 Factor loadings from the EFA, for the Perceived Cost of Mentoring (PCM) scale, the Negative cost of mentoring (NME) scale and Relational mentoring index (RMI) scale.

Item No.	Item name	Factor 1	Factor 2	Factor 3
Factor 1: risk to reputation				
11	Mentees can be a negative reflection of the mentor's competency.	.795		
10	An underperforming mentee can adversely affect a mentor's reputation.	.745		
5	Mentors can be betrayed by opportunistic mentees.	.650		
Factor 2: Mentoring effort				
1	Mentoring takes more time than it's worth.		.788	
2	Mentoring takes too much time away from one's own job.		.684	
13	Mentoring is an energy draining process.		.679	
Factor 3: Nepotism				
8	Mentors run the risk of being viewed as developing a political cadre (circle or clique) with their mentees.			.753
7	Mentors are often viewed by others as giving unfair advantages to their mentees.			.712
6	Members of the organisation often view mentors as playing favourites with mentee.			.618

		<i>Eigenvalues</i>	2.69	1.12	1.03
		<i>Explained variance %</i>	29.9	12.5	11.4
Negative Mentoring Experiences		Factor 1	Factor 2		
Factor 1: mismatch between the dyad					
6	My mentor and I have different personal character.	.812			
8	My mentor and I have dissimilar personalities.	.754			
9	My mentor and I are different from one another.	.692			
1	The personal values of my mentor are different from my own.	.687			
7	Comparing myself to my mentor, I would say our temperaments (personalities) are different.	.683			
2	My mentor and I have different life priorities.	.671			
3	My mentor and I have different work habits.	.614			
Factor 2: lack of mentor expertise					
10	My mentor lacks expertise in areas that are important for the type of work he/she does.		.701		
13	My mentor does not know much about the hospital system.		.694		
14	My mentor is not a high performer on the job.		.671		
11	I have my doubts about my mentor's job-related skills.		.663		
15	My mentor lacks the interpersonal skills necessary to show sensitivity when appropriate.		.647		
16	My mentor does not communicate well.		.614		
12	My mentor can't teach me anything I don't already know.		.603		
		<i>Eigenvalues</i>	4.62	2.06	
		<i>Explained variance %</i>	33.0	14.7	
Scale items		Factor 1	Factor 2		
Relational Mentoring Index					
Factor 1: Individual Influence					
4	My colleague/or supervisor has inspired or been a source of inspiration for me.	.862			
7	My colleague/or supervisor helps me learn more about myself.	.831			
3	My colleague/or supervisor is helping me become the person I aspire to be.	.827			
6	I am often inspired by my colleague/or supervisor.	.817			

5	My colleague/or supervisor gives me a fresh perspective that helps me think “outside the box.”	.793
10	My colleague/or supervisor brings out the best in me.	.753
9	My colleague/or supervisor always sees the best in me.	.673
1	My colleague/or supervisor is helping me learn and grow as a person.	.665
2	My colleague/or supervisor helps me learn about my personal strengths and weaknesses.	.651
8	My colleague/or supervisor sees me not only for who I am now, but also for who I aspire to be.	.609

Factor 2 Relational Quality

15	We give to each other without expecting repayment.	.831
13	In our relationship, we help each other without expecting repayment.	.793
12	I can be myself with my colleague/or supervisor.	.690
14	We never keep track of who gives and who gets in our relationship.	.686
21	Trust and commitment are central to our relationship.	.656
19	Our relationship is founded on mutual trust and commitment.	.571
17	We respect each other, and we value what each person has to say.	.513

<i>Eigenvalues</i>	8.10	1.38
<i>Variance explained</i>	47.6	8.14

6.10.3 Reliability tests

Reliability of the scales used in this study were determined using the test-retest reliability and internal consistency measures.

6.10.3.1 Test-retest reliability

Data was collected from 31 participants and 30 participants responded to the third phase of the study after two weeks to avoid recall bias (Polit, 2014; Rosales & Atroshi, 2019). The reliability study data was collected by a research assistant from a single hospital facility. Respondents answered the questionnaire over a Qualtrics link on a smart phone. Therefore, the RA was blinded to time one and time scores. The mean number of days between time 1 and time 2 scores was 16.9 (SD=4.5). Participants in the pilot study were generally female (76.7%) and nurses (63.3%). The average age was 31.7 (SD=9.0) with 6.6 (SD=6.7) years of

experience as a nurse/midwife. Although majority (93.3%) had been in a formal mentoring relationship, only 66.7% had ever received training in mentoring.

Reproducibility of the questionnaire was determined by both agreement and reliability measures (Terwee et al., 2007). Agreement was expressed in terms of standard error of measurement which denoted the closeness of the scores between time one and time two (Terwee et al., 2007). Reliability was determined using Intraclass correlations (ICC) estimates (Polit, 2014). The ICC is concerned with the ability of the scale to distinguish participants (Terwee et al., 2007). ICC estimates together with the 95% confidence intervals were determined based on the mean scores at week one and means scores at week two. The absolute agreement, two-way mixed model was used, and single measures noted and reported in table x below. The scale stability ranged from poor to moderate. This was probably due to the extended time period between test and retest of 16. Days (SD=4.5) (Polit, 2014).

The intraclass correlation coefficient (ICC) for the total score on the PCM scale was 0.609 (95% CI: 0.324–0.793), indicating the moderate stability of the scale. For the respective constructs, the results were as follows: *risk to reputation* had an ICC of 0.447 (95% CI: 0.122–0.689), *mentoring effort* had an ICC of 0.458 (95% CI: 0.119–0.700) and *nepotism* had an ICC of 0.583 (95% CI: 0.282–0.778). These indicate the poor to moderate stability of the constructs (Table 3).

The ICC for the total score on the NME scale was 0.568 (95% CI: 0.271–0.767), indicating the moderate stability of the scale. The test–retest results for the respective constructs were as follows: *mismatch between the dyad* had an ICC of 0.385 (95% CI: 0.056–0.645) and *lack of mentor expertise* had an ICC of 0.535 (95% CI: 0.222–0.748). These indicate the poor to moderate stability of the constructs (Table 3).

The ICC for the total score on the RMI scale was 0.664 (95% CI: 0.410–0.824), indicating the moderate stability of the scale. For the respective constructs, the results were as follows: *individual influence* had an ICC of 0.638 (95% CI: 0.364–0.810) and *relational quality* had an ICC of 0.409 (95% CI: 0.058–0.669). These indicate the poor to moderate stability of the constructs (Table 3).

Table 3

Table 6.3 showing reliability of the instruments.

Scale and subscale	Test-retest reliability		Cronbach alpha Main study
	ICC	(95% CI	
Perceived Cost Mentoring	0.609	0.324–0.793	0.705
Risk to reputation	0.447	0.122–0.689	0.599
Nepotism	0.583	0.282–0.778	0.527
Mentoring effort	0.458	0.119–0.700	0.555
Negative Mentoring Experiences	0.568	0.271–0.767	0.841
Lack of mentor expertise	0.535	0.222–0.748	0.788
Mismatch between the dyad	0.385	0.056–0.645	0.829
Relational Mentoring Index	0.664	0.410–0.824	0.933
Indivial Influence	0.638	0.364–0.810	0.927
Relational Quality	0.409	0.058–0.669	0.828
Social Exchange Orientation	0.479	0.149—0.713	0.899
Generalised Exchange Orientation	0.394	0.046 —0.657	0.904
Negotiated Exchange Orientation	0.534	0.220 —0.747	0.643
Reciprocal Exchange Orientation	0.508	0.187—0.731	0.760
Perceived Organisational Support	0.615	0.385—0.817	0.817
General Self-Efficacy	0.328	-0.031 —0.612	0.787

6.10.3.2 *Internal consistency*

Internal consistency was evaluated using Cronbach’s alpha (Portney, 2020). Internal consistency captures consistency in the scores on multiple items measuring the same construct in single administration (Tabachnick & Fidell, 2021). Cronbach’s alpha is a score of internal consistency that estimates the extent to which the scale and its constituent components is reliably measuring the underlying construct (Polit & Beck, 2021).

The Cronbach’s alpha of the overall PCM scale was 0.705, and that of each factor ranged between 0.527 and 0.599 (Table 3), indicating average consistency for the entire scale and marginal consistency for the constructs. Further, the item-to-total correlation ranged between 0.320 and 0.408.

The Cronbach's alpha of the adapted NME scale was 0.841, and that of each factor was 0.829 and 0.788 (Table 3), indicating high consistency for the entire scale and the constructs. Further, the item-to-total correlation ranged between 0.288 and 0.581.

The Cronbach's alpha of the adapted RMI scale was 0.933, and that of each factor was 0.927 and 0.828 (Table 3), indicating high consistency for the entire scale and the constructs.

The Cronbach's alpha of the adapted SEO scale was 0.899, and that of GEO factor was 0.904, for the NEO was 0.643 and for REO was 0.760 (Table 3), indicating high consistency for the entire scale and moderate to high consistency for the factors.

The Cronbach's alpha of the overall POS scale was 0.817, and that of GSE was 0.787 indicating good to average consistency for the POS and GSE scales respectively.

6.11 Ethical principles

Research involving human subjects ought to follow ethical principles. Several ethical issues exist in research studies; risk-to-benefit ratio, confidentiality, consent that is informed, dignity, and conflict of interest (West, 2020). Ethics approval was obtained from the Flinders University Research Ethics Committee (Project no. 4525) and the AIDS Support Organisation TASO Research Ethics Committee in Uganda (project no. TASOREC/056/2021-UG-REC-009). The study complied with all ethical guidelines as stated by the respective committees. All data collected was kept on Flinders University servers accessed via Flinders University computers. The human participants have a right to privacy (West, 2020). In this study, the participants identifying information, such as name and place of work, were not collected to protect their identity. A good study should have more benefits than risks associated with participating in the study. The participants benefit from the study by contributing to the body of evidence that informs nursing practice. The risks involved in this study mainly involve the loss of time. Participants also have a right to consent based on the information they have about the study (Polit & Beck, 2021). The participants were assured of their privacy, benefits, and risk in the participant information section of the survey. Upon reading the participant information, participants consented by agreeing or declining to participate in the study.

6.12 Chapter summary

This chapter has presented the design and methods that informed phase one of the study. A cross-sectional study was carried out sampling 303 nurses and midwives working in hospitals in Uganda. Data was collected online via Qualtrics and managed and analysed in SPSS version 27. Validity and reliability analyses were performed to ensure the scales were suitable for the Ugandan context.

CHAPTER 7: PHASE ONE QUANTITATIVE RESULTS

7.1 Chapter Introduction

This chapter presents results of the quantitative phase of the mixed methods study. The aim of this part of the main study was to:

- Determine the mentoring experiences of the nurses and midwives working in hospital settings in Uganda.
- Find the demographic characteristics associated with these mentoring experiences.
- Evaluate the relationship between these mentoring experiences and willingness to participate in mentoring, intentions to stay working for the same facility and intentions to advance career for nurses and midwives working in hospital settings in Uganda.

In order to achieve these objectives, 303 nurses and midwives participated in phase one of the study. This chapter initially describes the demographic characteristics of the participants. It then presents the distribution of study variables within the sample population. The subsequent section examines the relationship among the variables and analyses their distribution within the sample through bivariate analyses. Finally, the chapter explores the relationship between mentoring experiences and common mentoring outcomes, such as willingness to participate in mentoring, intentions to stay working for the same hospital, and intentions to advance one's career.

7.2 Demographic characteristics

Demographic characteristics of the 303 participants were explored. These included age, gender, professional experience in years, type of facility the participant was working for, qualification, professional registration status and their role in the hospital.

The age of the participants ranged from 20 to 58 years with an average age of 33.4 (SD= 8.52). The age of participants follows a normal distribution with skewness of 0.771 (SE= 0.145) and kurtosis of -0.228 (SE=0.288). Most participants were female (69.7%), nurses (60.8%) with no bachelor's degree (60.8%), working in public hospitals (78.9%), as staff nurses (63.1%). The level of professional experience working as a nurses or midwife in

hospital settings ranged from 4 months to 34 years with an average of 8.69 years (SD= 6.83); the skewness of 0.830(SE=0.143) and kurtosis of 0.048 (SE=0.284) approached normal distribution. More than half the participants (54.5%) indicated that they had not received any form of training in mentoring. Ultimately, most participants (57.8%) reported their involvement in either formal or informal mentoring relationships. The details of the demographic characteristics are shown in table 7.1 and 7.2.

Table 7.1 showing the demographic characteristics of the participants (n=303)

Variable	n	Category	Frequency	Percentage
Gender	300	Male	91	30.3
		Female	209	69.7
Experience	292	5 years and less	126	43.2
		More than 5 years	166	56.8
Profession registration	301	Nurse	183	60.8
		Midwife	70	23.3
		Both	48	15.9
Qualification	301	No degree	183	60.8
		Has bachelor's degree.	118	39.2
Type of facility	298	Public hospital	235	78.9
		Private hospital	63	21.1
Department	302	Surgery	26	8.6
		Medical	97	32.1
		Psychiatry	10	3.3
		Obstetrics and gynaecology	72	23.8
		Paediatric	48	15.9
		Others	49	16.2
Position held in hospital	301	Staff nurse	190	63.1
		Ward in-charge	46	15.3
		Head of department	14	4.7
		Others	51	16.9
Received training in mentoring	301	Yes	137	45.5
		No	164	54.5
Type of mentoring relationship	301	Informal mentoring	85	28.2
		Formal mentoring	42	14.0
		Both	174	57.8

7.3 Variable description

The variables in this section are categorised into three broad groups: Mentoring experiences and perceptions, mentoring outcomes, and the explanatory variables. Mentoring experiences

and perception variables included positive mentoring experiences, negative mentoring experiences and perceived cost of mentoring. Mentoring outcome variables included willingness to participate in future mentoring programs, intention to stay and intention to advance career.

Table 7.2 Showing means, standard deviations of the study variables.

	n	Mean	SE of mean	SD	Range of scores
Demographics					
Age	284	33.4	0.506	8.524	20 — 58
Professional Experience	292	8.69	0.4000	6.83	0.25 — 34
Mentoring experiences					
Individual influence	300	5.49	0.066	1.15	1 — 7
Relational quality	300	5.52	0.059	1.02	1 — 7
Lack of mentor expertise	302	2.25	0.039	0.684	1 — 5
Mismatch between the dyad	300	3.68	0.044	0.763	1 — 5
Mentoring perceptions					
Nepotism	298	3.69	0.082	1.42	1 — 7
Risk to reputation	300	4.67	0.085	1.47	1 — 7
Mentoring effort	298	3.58	0.087	1.50	1 — 7
Mentoring outcomes					
Willingness to participate in mentoring	294	6.88	0.167	2.857	0 — 10
Intention to stay	293	6.13	0.180	3.08	0 — 10
Intention to advance career	299	7.97	0.140	2.42	0 — 10
Other predictor variables					
Collective reciprocity	301	5.56	0.064	1.11	1 — 7
Direct reciprocity	299	4.69	0.079	1.37	1 — 7
Negotiated exchange	300	3.27	0.079	1.37	1 — 7
Perceived organisation support	291	4.64	0.070	1.20	1 — 7
Self-efficacy	289	3.38	0.027	0.462	1 — 4

Note: Listwise deletion for missing data

7.3.1 Mentoring experiences and perceptions

7.3.1.1 Positive experiences

Positive mentoring experiences were measured with 17 items of the relational mentoring index (Ragins, 2012). The scale had two factors after EFA: *Individual Influence* and *Relational Quality*, measured on a 7-point Likert scale. The *Individual Influence* sub-scale measured participants' experience of relational mentoring functions directed towards the individual (self). At the same time, the *Relational Quality* sub-scale measured the quality of interpersonal interaction in a mentoring relationship.

Individual Influence: The overall mean score on *Individual Influence* was 5.49 (SD= 1.15), the skewness was -1.125 (SE=0.141), and kurtosis was 1.40 (SE=0.281), as shown in Table 7.2. The item mean scores ranged from 5.32 to 5.66. The highest mean score of 5.66 (SD=1.43) was obtained for item 1, "My colleague/or supervisor is helping me learn and grow as a person". The lowest mean score of 5.32 (SD= 1.56) was obtained for item 9, "My colleague/or supervisor always sees the best in me", as shown in Table 7.3. These results indicate that overall, participants experienced a high amount of *Individual Influence* in their mentoring relationships. Moreover, these experiences were mainly attributed to personal learning and growth and least to affirmation of the best self.

Relational Quality: The overall mean score on *Relational Quality* was 5.53 (SD= 1.02), the skewness was -1.70 (SE= 0.141), and kurtosis was 4.15 (SE= 0.281), as shown in Table 7.2. The item mean scores ranged from 4.94 to 5.76. The highest mean score of 5.76 (SD= 1.30) was obtained for item 17, "We respect each other, and we value what each person has to say," and the lowest mean score of 4.94 (SD= 1.77) was obtained for item 14, "We never keep track of who gives and who gets in our relationship" as shown in Table 7.3. These results suggest that, overall, participants experienced high-quality mentoring relationships. Furthermore, this quality mainly arose from their shared influence and respect and was least attributed to communal norms.

Table 7.3 showing item means and standard deviations for the relational mentoring index.

	ITEM NO.	OBSERVED VARIABLE	M	SD
INDIVIDUAL INFLUENCE	1	My colleague/or supervisor is helping me learn and grow as a person.	5.66	1.43
	2	My colleague/or supervisor helps me learn about my personal strengths and weaknesses.	5.63	1.35
	3	My colleague/or supervisor helps me learn more about myself.	5.34	1.61
	4	My colleague/or supervisor has inspired or been a source of inspiration for me.	5.53	1.58
	5	My colleague/or supervisor gives me a fresh perspective that helps me think "outside the box."	5.59	1.39
	6	I am often inspired by my colleague/or supervisor.	5.55	1.53
	7	My colleague/or supervisor is helping me become the person I aspire to be.	5.46	1.58
	8	My colleague/or supervisor sees me not only for who I am now, but also for who I aspire to be.	5.44	1.58
	9	My colleague/or supervisor always sees the best in me.	5.32	1.56
	10	My colleague/or supervisor brings out the best in me.	5.33	1.60
RELATIONAL QUALITY	12	I can be myself with my colleague/or supervisor.	5.60	1.38
	13	In our relationship, we help each other without expecting repayment.	5.68	1.42
	14	We never keep track of who gives and who gets in our relationship	4.94	1.77
	15	We give to each other without expecting repayment.	5.56	1.44
	17	We respect each other, and we value what each person has to say.	5.76	1.30
	19	Our relationship is founded on mutual trust and commitment.	5.57	1.38
	21	Trust and commitment are central to our relationship.	5.65	1.33

7.3.1.2 Negative mentoring experiences

Negative mentoring experiences were measured with 13 items of the Negative mentoring experiences scale (Eby & Allen, 2002). For this study, two subscales were adapted: *a lack of mentor expertise* and *a mismatch between the dyad*. The constituent items were measured on a 5-point Likert scale, with high scores indicating high negative experiences. The *lack of mentor expertise* sub-scale measured participants' belief that their mentor did not possess the skills and expertise to mentor. For the *mismatch between the dyad* sub-scale, this measured the participant's experience with compatibility between them and their mentor.

Lack of mentor expertise: The overall mean score on *lack of mentor expertise* was 2.25 (SD= 0.684), the skewness was 0.513 (SE= 0.140), and kurtosis was 0.222 (SE=0.280), as shown in Table 7.2. The item mean scores ranged from 2.00 to 2.44. The highest mean score of 2.44 (SD= 1.13) was obtained from item 15, "My mentor lacks the interpersonal skills necessary to show sensitivity when appropriate." The lowest mean score of 2.00 (SD= 0.989) was obtained from item 12, "My mentor does not know much about the hospital system," as shown in Table 7.4. These results suggest that overall, nurses and midwives in hospitals in Uganda experienced low deficiencies in mentor expertise, and these deficiencies were mainly attributed to a lack of interpersonal skills and, most minor, to a deficiency in knowledge of the hospital systems.

Mismatch between the dyad: The overall mean score on *the mismatch between the dyad* was 3.68 (SD= 0.763), the skewness was -1.02 (SE= 0.140), and kurtosis was 1.31 (SE= 0.280), as shown in Table 7.2. The item mean scores ranged from 3.52 to 3.85. The highest mean score of 3.85 (SD=1.03) was obtained for item 7, "Comparing myself to my mentor, I would say our temperaments (personalities) are different," and the lowest mean score of 3.52 (SD= 1.07) was obtained from item 1, "The personal values of my mentor are different from my own" as shown in table 7.4. These results indicate that, overall, participants experienced moderate levels of mismatch with their mentors, and this mismatch was mainly attributed to a difference in personality and least triggered by a difference in their value system.

Table 7.4 Showing item means and standard deviations for the negative mentoring experiences scale.

	ITEM NO.	OBSERVED VARIABLE	M	SD
MISMATCH BETWEEN THE DYAD	1	The personal values of my mentor are different from my own.	3.52	1.07
	2	My mentor and I have different life priorities.	3.78	1.06
	3	My mentor and I have different work habits.	3.35	1.15
	6	My mentor and I have different personal character.	3.84	1.02
	7	Comparing myself to my mentor, I would say our temperaments (personalities) are different.	3.85	1.03
	8	My mentor and I have dissimilar personalities.	3.64	1.07
	9	My mentor and I are different from one another.	3.75	1.10
LACK OF MENTOR EXPERTISE	10	My mentor lacks expertise in areas that are important for the type of work he/she does.	2.29	1.02
	11	I have my doubts about my mentor's job-related skills.	2.29	0.989
	12	My mentor can't teach me anything I don't already know.	2.00	0.941
	13	my mentor does not know much about the hospital system.	2.00	0.901
	14	My mentor is not a high performer on the job.	2.41	1.11
	15	My mentor lacks the interpersonal skills necessary to show sensitivity when appropriate.	2.44	1.13
	16	My mentor does not communicate well.	2.34	1.02

7.3.1.3 Perceived cost of mentoring

The perceived cost of mentoring was measured with nine items adapted from the perceived cost of mentoring scale (Ragins & Scandura, 1999). For this study, three subscales: Risk to reputation, Nepotism, and Mentoring effort, were adapted. The constituent items were measured on a 7-point Likert scale, with high scores indicating a high perception that mentoring is costly. The Risk to Reputation sub-scale measured participants' belief that mentoring others negatively impacts their reputation within the organisation. The Nepotism sub-scale measured the participant's belief that mentoring others means having favourites

within the hospital. In contrast, mentoring effort subscale measured nurses' and midwives' perceptions that mentoring takes a lot of time and energy.

Risk to reputation: The overall mean score on *Risk to Reputation* was 4.67 (SD= 1.47), the skewness was -0.673 (SE= 0.141), and kurtosis was -0.536 (SE= 0.281), as shown in Table 7.2. The item mean scores ranged from 4.47 to 4.95. The highest mean score of 4.95 (SD= 1.97) was obtained for item 10, "An underperforming mentee can adversely affect a mentor's reputation". The lowest mean score of 4.47 (SD= 1.94) was obtained for item 11, "Mentees can be a negative reflection of the mentor's competency", as shown in Table 7.5.

Nepotism: The overall mean score on Nepotism was 3.69 (SD= 1.42), the skewness was 0.085 (SE= 0.141), and kurtosis was -0.976 (SE= 0.281), as shown in Table 7.2. The item mean scores ranged from 3.49 to 3.79. The highest mean score of 3.79 (SD=2.00) was obtained for item 8, "Mentors run the risk of being viewed as developing a political cadre (circle or clique) with their mentees", and the lowest mean score of 3.49 (SD= 1.95) was obtained for item 7 "Mentors are often viewed by others as giving unfair advantages to their mentees" as shown in Table 7.5.

Mentoring effort: The overall mean score on *Mentoring effort* was 3.58 (SD= 1.50), the skewness was 0.179 (SE= 0.141), and kurtosis was -0.963 (SE= 0.281), as shown in Table 7.2. The item mean scores ranged from 3.35 to 3.73. The highest mean score of 3.73 (SD= 2.09) was obtained for item 13, "Mentoring is an energy draining process", and the lowest mean score of 3.35 (SD= 2.05), was obtained for item 1, "Mentoring takes more time than it's worth" as shown in Table 7.5.

These results suggest that nurses and midwives in Uganda generally had moderate beliefs that mentoring others was a risk to their reputation in the organisation. They also had low beliefs regarding nepotism and mentoring effort, respectively.

Table 7.5 Showing item means and standard deviations for the Perceived Cost of Mentoring scale.

	ITEM NO.	OBSERVED VARIABLE	M	SD
RISK TO REPUTATION	5	Mentors can be betrayed by opportunistic mentees.	4.61	2.00
	10	An underperforming mentee can adversely affect a mentor's reputation.	4.95	1.97
	11	Mentees can be a negative reflection of the mentor's competency.	4.47	1.94
NEPOTISM	6	Members of the organisation often view mentors as playing favourites with mentee.	3.78	1.99
	7	Mentors are often viewed by others as giving unfair advantages to their mentees.	3.49	1.95
	8	Mentors run the risk of being viewed as developing a political cadre (circle or clique) with their mentees.	3.79	2.00
MENTORING EFFORT	1	Mentoring takes more time than it's worth.	3.35	2.05
	2	Mentoring takes too much time away from one's own job.	3.68	2.04
	13	Mentoring is an energy draining process.	3.73	2.09

7.3.2 Mentoring outcomes

7.3.2.1 Willingness to Participate in future formal mentoring programs.

Willingness to participate in future mentoring programs was measured with one item “On a scale of 0 to 10, how likely are you to participate in a formal mentoring program established by the hospital?”. Nurses and midwives were moderately ($M = 6.8$, $SD = 2.86$) willing to participate in future mentoring programs (Table 7.2). Although the data was slightly skewed (-0.696 , $se = 0.142$), as shown in Figure 7.1, these values were within acceptable ranges (Trochim & Donnelly, 2001).

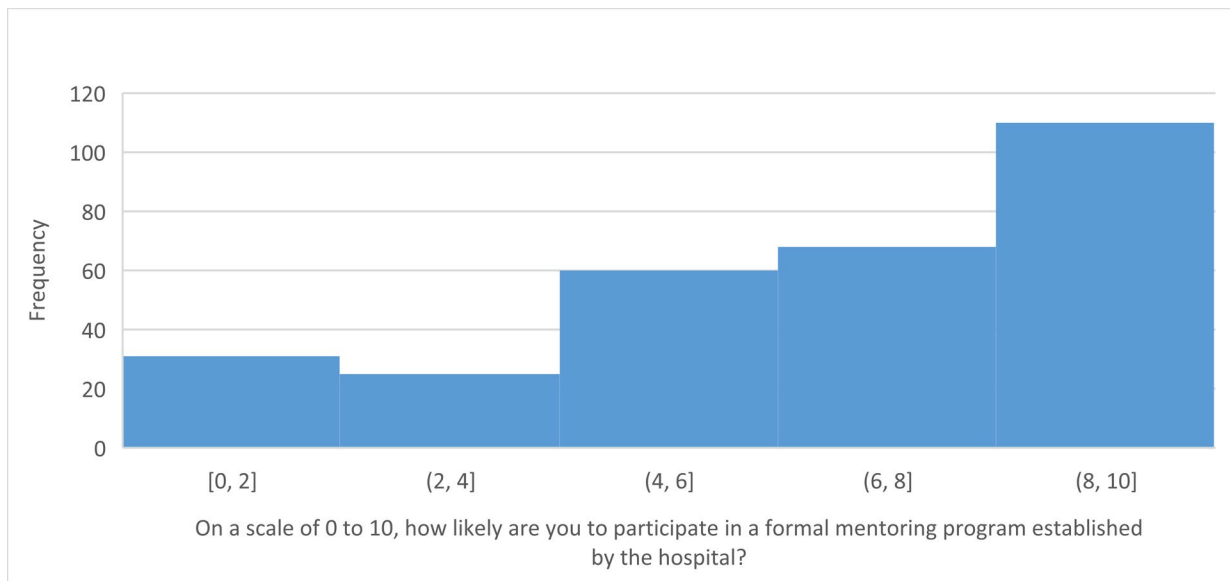


Figure 7.1 Showing participant willingness to participate in future formal mentoring programs.

7.3.2.2 *Intention to stay.*

The participant's turnover intentions were measured with one item "On a scale of 0 to 10, how likely are you to stay working for this hospital in the next 5 years?". The mean score on intention to stay was 6.13 (SD= 3.08), the skewness was -0.410 (SE= 0.142), and kurtosis was -0.923 (SE= 0.284), as shown in Table 7.2 and Figure 7.2. These results suggest that nurses and midwives were just likely to stay working for the same hospital in the ensuing 5 years.

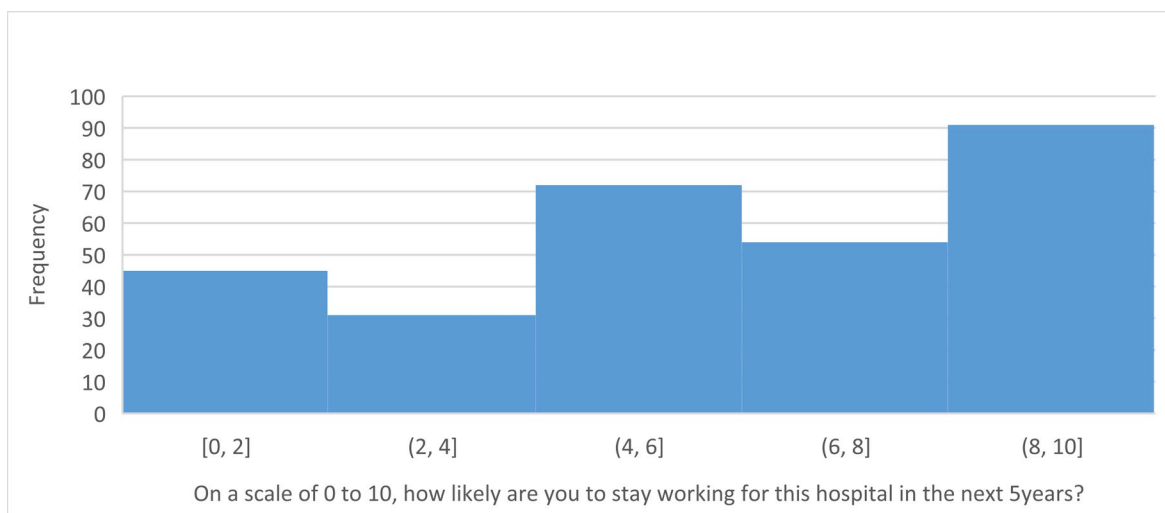


Figure 7.2 Showing the participant intention to stay working at the same facility.

7.3.2.3 Intentions to advance career.

The participant's intentions to advance careers were measured with one item "On a scale of 0 to 10, how likely are you to advance your academic qualification in the next 5 years?". The mean score on intentions to advance career was 7.97 (SD= 2.42), the skewness was -1.32(SE= 0.141), and kurtosis was 1.14 (SE= 0.281), as shown in Table 7.2 and Figure 7.3. These results suggest that nurses and midwives were highly likely to advance their careers within the next 5 years.

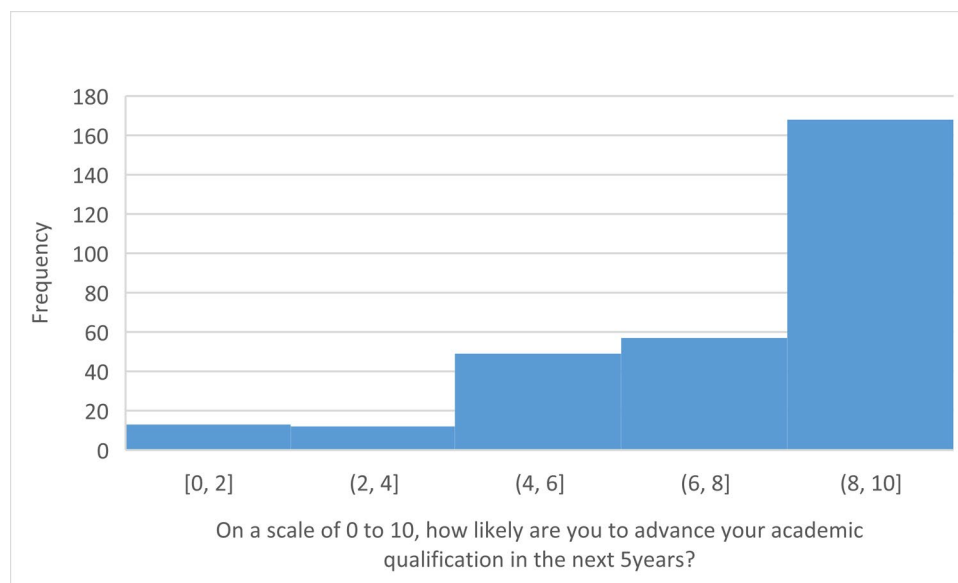


Figure 7.3 Showing participant intentions to advance their career.

7.3.3 Explanatory variables

7.3.3.1 Social exchange orientation

Social exchange orientation was measured with 20 items measuring Generalised exchange, reciprocal exchange, and negotiated exchange orientation on a 7-point Likert scale (Yoshikawa et al., 2020). *Generalised Exchange Orientation* measures a participant's belief in collective reciprocity, while *Reciprocal Exchange Orientation* measures a participant's belief in the rules of direct reciprocity. *Negotiated Exchange Orientation* measures the participant's belief in the rules of exchange in dyadic relationships.

Generalised exchange orientation: The overall mean score on *Generalised Exchange Orientation* was 5.56 (SD= 1.11), the skewness was -2.189 (SE= 0.141), and kurtosis was 5.95 (SE= 0.280), as shown in Table 7.2. The item mean scores ranged from 4.98 to 5.95. The

highest mean score of 5.95 (SD= 1.26) was obtained for item 2, “It is right to help others at work, as I will receive help from someone in the future”, and the lowest mean score of 4.98 (SD= 1.88) was obtained for item 9 “At work, I should be kind to those who are kind to others” as shown in table 7.6. These results suggest that nurses and midwives working in Ugandan hospitals had firm beliefs in collective reciprocity. These beliefs mainly arose from individuals giving with the expectation of indirect reciprocation. At the same time, items about rewarding reputation contributed less to the beliefs of collective reciprocity.

Reciprocal Exchange Orientation: The overall mean score on Reciprocal Exchange Orientation was 4.69 (SD= 1.37), the skewness was -0.720 (SE= 0.141), and kurtosis was -0.153 (SE= 0.281), as shown in Table 2. The item mean scores ranged from 4.13 to 5.27. The highest mean score of 5.27 (SD= 1.61) was obtained for item 19, “If someone does something for me, I feel the need to do something for him/her”, and the lowest mean score of 4.13 (SD= 1.90) was obtained for item 20 “At work, I always repay someone who has done me a favour” as shown in table 7.6. These results suggest that participants had moderate beliefs in direct reciprocity overall. These beliefs are based more on the desire to reciprocate than the actual behaviour of reciprocity.

Negotiated Exchange Orientation: The overall mean score on Negotiated Exchange Orientation was 3.27 (SD= 1.37), the skewness was 0.468 (SE= 0.141), and kurtosis was -0.344 (SE= 0.281), as shown in Table 7.2. The item mean scores ranged from 2.93 to 4.02. The highest mean score of 4.02 (SD= 2.09) was obtained for item 13, “At work, it generally pays to clarify rewards before making extra efforts for others”, and the lowest mean score of 2.93 (SD= 1.90) was obtained for item 14 “If I do not ask for something in return before doing a task for others at work, I will be taken advantage of” as shown in table 7.6. These results indicate that overall, the nurses and midwives had low beliefs in the rules of exchange. They were least worried about being taken advantage of and more inclined to clarifying the rules of exchange in a dyad relationship.

Table 7.6 Showing item means and standard deviations for the Social Exchange Orientation scale.

ITEM NO.	OBSERVED VARIABLE	M	SD
GENERALISED EXCHANGE ORIENTATION (GEO)	1 I think kindness to others in the workplace will eventually come back to me in some way.	5.94	1.30
	2 It is right to help others at work, as I will receive help from someone in the future	5.95	1.26
	3 My efforts for colleagues will be rewarded by someone at some point, if not immediately.	5.26	1.81
	4 I am happy to do favours for others at work, as I will someday need a favour from someone.	5.68	1.51
	5 When I receive support from a colleague, I should provide support to others in the workplace	5.72	1.36
	6 When a colleague in the workplace makes extra efforts for me, I often start thinking what I can do for others	5.56	1.43
	7 Receiving kindness from a colleague in the workplace makes me feel I should do something for others.	5.76	1.40
	8 When I receive someone's favour at work, I want to repay the debt by doing a favour for others.	5.15	1.78
	9 At work, I should be kind to those who are kind to others.	4.98	1.88
	10 I believe those who often go the extra mile for others at work deserve my effort to help them.	5.70	1.39
	11 When a colleague who often gives support to others is in trouble, I should do something for him/her.	5.71	1.47
	12 When I find someone in the workplace helping others, I feel I should offer help when he/she needs.	5.80	1.37
RECIPROCAL EXCHANGE ORIENTATION (REO)	17 When I receive support from a colleague, I should remember to give something back to him/her.	4.45	1.84
	18 If someone in the workplace does me a favour, I feel obliged to repay him/her in some way.	4.96	1.76
	19 If someone does something for me, I feel the need to do something for him/her.	5.27	1.61
	20 At work, I always repay someone who has done me a favour.	4.13	1.90
NEGOTIATED EXCHANGE ORIENTATION (NEO)	13 At work, it generally pays to clarify rewards before making extra efforts for others.	4.02	2.09
	14 If I do not ask for something in return before doing a task for others at work, I will be taken advantage of.	2.93	1.90
	15 When I ask a colleague to help me with work, I should ask him/her what he/she wants in return.	3.12	1.88
	16 I hesitate to ask colleagues to do something extra for me unless I can offer concrete benefits in exchange.	3.04	1.83

7.3.3.2 Perceived Organisation Support

Perceived organisation support was measured with a short scale of 8 items on a 7-point Likert scale (Eisenberger et al., 1986). Perceived organisation support measures a participant's belief that the organisation they work for has their best interest. Items 1, 2, 5, and 7 were negatively worded. Therefore, they were reverse-scored as per the author's guide

(Eisenberger et al., 1986). The higher the score, the greater the perceived organisation support.

The overall mean score on *Perceived Organisation Support* was 4.64 (SD= 1.20), the skewness was -0.456 (SE= 0.143), and kurtosis was -0.214 (SE= 0.285), as shown in Table 7.2. The item mean scores ranged from 4.24 to 5.46. The highest mean score of 5.46 (SD= 1.55) was obtained for item 1, “The organisation/hospital fails to appreciate any extra effort from me”, and the lowest mean score of 4.24 (SD= 1.80) was obtained for item 6, “The organisation/hospital cares about my general satisfaction at work” as shown in table 7.7. These results suggest that overall, participants had moderate levels of perceived organisation support.

Table 7.7 Showing item means and standard deviations for the Perceived Organisation Support scale.

ITEM NO.	OBSERVED VARIABLE	M	SD
1	The organisation/hospital fails to appreciate any extra effort from me.	5.46	1.55
2	The organisation/hospital fails to appreciate any extra effort from me.	4.45	1.99
3	The organisation/hospital can ignore any complaint from me.	4.44	1.92
4	The organisation/hospital really cares about my well-being.	4.66	1.77
5	Even if I did the best job possible, the organisation/hospital would fail to notice.	4.50	1.88
6	The organisation/hospital cares about my general satisfaction at work.	4.24	1.80
7	The organisation/hospital shows very little concern for me.	4.31	1.80
8	The organisation/hospital takes pride in my accomplishments at work.	5.17	1.55

7.3.3.3 General Self-Efficacy

General self-efficacy was measured with a 10-item scale on a 4-point Likert scale (Schwarzer & Jerusalem, 1995). General self-efficacy measures a participant’s belief in their abilities. The higher the score, the greater the self-efficacy. The overall mean score on General Self-Efficacy was 3.38 (SD= 0.462), the skewness was -1.92 (SE= 0.143), and kurtosis was 6.82 (SE= 0.286), as shown in Table 7.2. The item mean scores ranged from 2.93 to 3.65. The highest mean score of 3.65 (SD= 0.585) was obtained for item 9, “If I am face with a challenge, I can usually think of a solution”, and the lowest mean score of 2.93 (SD= 0.950)

was obtained for item 2 “If someone opposes me, I can find the means and ways to get what I want” as shown in table 7.8. These results suggest that participants had very high self-efficacy.

Table 7.8 Showing item means and standard deviations for the General Self-Efficacy scale.

ITEM NO.	OBSERVED VARIABLE	M	SD
1	I can always manage to solve difficult problems if I try hard enough.	3.48	0.683
2	If someone opposes me, I can find the means and ways to get what I want.	2.93	0.950
3	It is easy for me to stick to my aims and accomplish my goals.	3.56	0.717
4	I am confident that I can deal efficiently with unexpected events.	3.37	0.708
5	Thanks to my resourcefulness, I know how to handle unforeseen situations.	3.23	0.726
6	I can solve most problems if I invest the necessary effort.	3.55	0.667
7	I can remain calm when facing difficulties because I rely on my coping abilities.	3.46	0.765
8	When I am confronted with a problem, I can usually find several solutions.	3.46	0.686
9	If I am face with a challenge, I can usually think of a solution.	3.65	0.585
10	I can usually handle whatever comes my way.	3.28	0.759

7.4 Bivariate analyses

Bivariate analyses were performed using three types of analyses. Firstly, continuous variables were correlated using Pearson’s correlations. Pearson’s correlations identify relationships between two variables measured on an interval scale (Polit & Beck, 2021). Pearson’s correlations test the magnitude and nature of relationships between two variables. In this study, the correlations ranged from 0.002 to 0.6, as shown in Table 7.9. Secondly, t-tests were performed for every variable and the categorical demographic characteristics. This was done to determine the distribution of the variables within the population under study (Portney, 2020). Lastly, one-way ANOVA was done to determine the occurrence of a variable in the demographic variable professional registration. ANOVA statistic produces an F-test appropriate for determining differences among groups with more than two categories (Portney, 2020). The results for t-tests and F-tests are shown in the subsequent sections.

Table 7.9 Correlations among study variables

		Gender	Experience	Qualification	Type of facility	Willingness	Intention to stay	Career advance	Individual influence	Relational quality	Lack Expertise	Mismatch	Risk reputation	Nepotism	Mentoring effort	Collective reciprocity	Direct reciprocity	Negotiated exchange	POS	Self-efficacy
Gender	r	1																		
	P																			
	n	300																		
Experience	r	.181**	1																	
	P	0.002																		
	n	290	292																	
Qualification	r	-.231**	-.208**	1																
	P	<.001	<.001																	
	n	299	291	301																
Type of facility	r	-.017	-.219**	-.011	1															
	P	.772	<.001	.854																
	n	296	288	297	298															
Willingness mentor	r	-.009	.050	.130*	.069	1														
	P	.879	.399	.027	.243															
	n	293	284	293	290	294														
Intention to stay	r	.155	.183**	-.369**	-.159**	.148*	1													
	P	.008	.002	.000	.007	.012														
	n	293	283	292	289	289	293													
Career advance	r	-.062	-.242**	.158**	.064	.176**	-.101	1												
	P	.290	<.001	.006	.271	.002	.083													
	n	297	289	298	295	293	293	299												
Individual Influence ^a	r	-.067	.001	-.045	-.015	.209**	.174**	.087	1											
	P	.248	.986	.437	.795	<.001	.003	.134												
	n	298	290	299	296	292	291	297	300											
Relational Quality ^b	r	.041	.074	-.073	-.093	.202**	.171**	.072	.674**	1										
	P	.481	.212	.210	.109	<.001	.003	.217	<.001											
	n	298	290	299	296	292	291	297	299	300										
Lack Expertise ^c	r	.059	.154**	-.101	-.164**	-.192**	-.043	-.156**	-.305**	-.170**	1									
	P	.308	.008	.081	.004	<.001	.462	.007	<.001	.003										
	n	300	292	301	298	294	293	299	300	302										
Mismatch ^d	r	.198	.121*	-.125*	-.007	-.083	.047	-.060	-.125*	-.067	.385**	1								
	P	.000	.039	.030	.900	.157	.424	.305	.031	.251	<.001									
	n	298	290	299	296	292	291	297	299	299	300	300								
Risk reputation ^e	r	.091	-.066	-.125*	-.052	-.117*	.061	-.074	-.065	.032	.178**	.275**	1							
	P	.117	.260	.031	.377	.046	.302	.201	.263	.581	.002	<.001								
	n	298	291	299	296	292	291	297	299	298	300	299	300							
Nepotism ^f	r	.157**	-.021	-.058	-.043	-.134*	-.033	.047	-.038	-.006	.153**	.298**	.364**	1						
	P	.007	.718	.315	.456	.022	.580	.424	.516	.915	.008	<.001	<.001							
	n	296	289	297	294	290	289	295	298	298	298	298	298	298						
Mentoring effort ^g	r	.088	.167**	-.195**	-.056	-.050	.082	-.096	.026	.007	.213**	.179**	.328**	.310**	1					
	P	.132	.005	<.001	.338	.394	.164	.099	.652	.900	<.001	.002	<.001	<.001						

	n	296	289	297	294	290	289	295	298	298	298	298	298	298	298						
Collective reciprocity^h	r	.021	-.003	.024	.004	-.016	.076	.002	.060	.105	-.075	.119*	.054	.072	.019	1					
	P	.722	.961	.676	.939	.788	.195	.972	.300	.071	.193	.040	.350	.216	.748						
	n	299	291	300	297	293	292	298	299	299	301	299	299	297	301						
Direct reciprocityⁱ	r	-.044	-.089	.051	.052	-.065	.025	-.090	-.030	-.053	-.014	.129*	.123*	.168**	.055	.647**	1				
	P	.447	.129	.377	.375	.269	.667	.123	.605	.360	.805	.026	.034	.004	.342	<.001					
	n	297	289	298	295	291	290	296	299	298	299	298	298	297	297	299	299				
Negotiated exchange^j	r	-.061	.018	.043	-.004	-.162**	-.162**	-.041	-.116*	-.158**	.069	.054	.050	.115*	.137*	.289**	.450**	1			
	P	.293	.759	.464	.947	.006	.006	.480	.045	.006	.233	.349	.392	.047	.019	<.001	<.001				
	n	298	290	299	296	292	292	297	299	299	300	298	298	297	297	300	299	300			
Perceived organisation support^k	r	-.041	-.045	.031	.107	.222**	.222**	.142*	.457**	.353**	-.281**	-.136*	-.170**	-.199**	.225**	.058	-.080	-.186**	1		
	P	.289	.455	.600	.071	<.001	<.001	.016	<.001	<.001	<.001	.021	.004	<.001	<.001	.326	.176	.001			
	n	289	281	290	287	283	283	289	289	291	289	289	287	287	291	289	290	291			
Self-efficacy^l	r	.112	.018	-.119*	-.062	.042	.042	.175**	.248**	.342**	-.067	.192**	.062	.048	-.036	.361**	.125*	.002	.183**	1	
	P	.058	.763	.044	.295	.484	.484	.003	<.001	<.001	.259	.001	.294	.424	.548	<.001	.035	.978	.002		
	n	287	279	288	282	281	281	287	287	287	289	287	287	285	285	288	286	287	288	289	
		Gender	Experience	Qualification	Type of facility	Williness	Intention to stay	Career advance	Individual influence	Relational quality	Lack Expertise	Mismatch	Risk reputation	Nepotism	Mentoring effort	Collective reciprocity	Direct reciprocity	Negotiated exchange	Perceived organisation support	Self-efficacy	

aRelational mentoring index scores: high scores indicate high quality of mentoring for Individual Influence subscale. bRelational mentoring index scores: high scores indicate high quality of mentoring for Relational quality subscale. cLack of mentor expertise scores: high scores indicate worse experience. dMismatch between the dyad scores: high scores indicate worse experience. eRisk to reputation scores: high scores indicate high perception that mentoring is costly. fNepotism scores: high scores indicate high perception that mentoring is costly. gMentoring effort scores: high scores indicate high perception that mentoring is costly. hCollective reciprocity scores: high scores indicate high belief in generalised (communal) reciprocity. iDirect reciprocity scores: high scores indicate high belief in reciprocity between the dyad. jNegotiated exchange scores: high scores indicate high belief in rules of exchange. kPerceived organisation support scores: high scores indicate high levels of organisation support. lGeneral Self-efficacy scores: high scores indicate high belief in own abilities. Gender: male 0, female 1. Professional experience: Less than 5 years 0, more than five years 1. Qualification: has no degree 0, has a degree 1. Facility: public hospital 0, private hospital 1. *p<0.05, **p<0.01

7.4.1 Mentoring experiences

7.4.1.1 Positive experiences

Independent t-tests and one-way ANOVA were performed to evaluate differences between/among groups in their positive mentoring experience. The Bivariate analyses for both Individual Influence and Relational Quality variables showed no significant differences between/among groups for gender, qualification, experience, type of facility, and professional registration, as shown in Table 7.10.

Table 7.10 Showing the demographic characteristics and positive mentoring experiences.

Variable	Category	Individual Influence					Relational Quality				
		Frequency	Mean	t-test	df	P value	Frequency	Mean score	t-test	df	P value
Gender	Male	89	5.60	1.16	296	0.248	89	5.46	-0.705	296	0.481
	Female	209	5.45				209	5.56			
Qualification	No Degree	183	5.53	0.738*	202.9	0.231	183	5.59	1.20*	209.0	0.232
	Has a degree	116	5.43				116	5.44			
Experience	5 and less years	124	5.49	-0.017*	233.8	0.986	124	5.43	-1.193*	209.8	0.234
	More than 5 years	166	5.49				166	5.59			
Type of facility	Public hospital	234	5.50	0.260	294	0.795	233	5.58	1.26*	76.2	0.213
	Private hospital	62	5.46				63	5.35			
Training in mentoring	No	163	5.39	-1.56	297	0.120	162	5.44	-1.70	297	0.090
	Yes	136	5.60				137	5.64			
		Frequency	Mean	F-test	df	P value	Frequency	Mean score	F-test	df	P value
Profession registration	Nurse	182	5.47	0.139**	2, 116.4	0.871	182	5.52	0.242**	2, 122.8	0.785
	Midwife	70	5.48				70	5.49			
	Both	47	5.56				47	5.60			

Showing test statistic for equal variances not assumed due to *Levene's test being significant or **the unequal sample size among groups (Welch's test)

7.4.1.2 Negative experiences

Negative mentoring experiences were studied using two variables: Lack of mentor expertise and Mismatch between the dyad. Independent t-tests and one-way ANOVA were performed to evaluate differences between/among groups in their scores on negative mentoring experiences subscales.

Lack of mentor Expertise: The participants with more than 5 years of experience had significantly higher scores on the *Lack of mentor Expertise* variable ($M = 2.35$, $SD=0.637$) than those that had 5 or less years of experience ($M = 2.14$, $SD=0.729$), $t(290)=2.66$, $p=0.008$. The difference between these two groups was of medium effect ($d=0.314$ 95%CI [0.081 – 0.547]). The participants that worked in public hospitals had significantly higher scores on the *Lack of mentor Expertise* variable ($M = 2.31$, $SD=0.687$) than those that worked in private hospitals ($M = 2.03$, $SD=0.645$), $t(296)=2.87$, $p=0.004$. The difference between these two groups was of small to medium effect ($d=0.407$ 95%CI [0.126 – 0.686]). There was no significant difference among groups in their scores on the *Lack of mentor Expertise* variable for gender, qualification, training in mentoring, and professional registration, as shown in Table 7.11.

Mismatch between the dyad: Females had significantly higher scores on the *Mismatch between the dyad* variable ($M= 3.83$ $SD=0.681$) than males ($M= 3.50$ $SD=0.900$) $t(132.8)=3.11$ $p=0.002$. This difference was of medium effect ($d=0.440$ 95%CI [0.189 — 0.690]). The participants that had a degree had significantly lower scores on the *Mismatch between the dyad* variable ($M = 3.60$, $SD=0.874$) than those that had no degree ($M = 3.80$, $SD=0.680$), $t(201.5)=2.06$, $p=0.041$. The difference between these two groups was of small effect ($d=0.258$ 95%CI [0.025 – 0.492]). The participants with more than 5 years of experience had significantly higher scores on the *Mismatch between the dyad* variable ($M = 3.81$, $SD=0.666$) than those that had 5 or less years of experience ($M = 3.62$, $SD=0.879$), $t(220.8)=1.99$, $p=0.047$. The difference between these two groups was of small effect ($d=0.246$ 95%CI [0.012 – 0.479]). There was no significant difference between/among groups in their scores on the *Mismatch between the dyad* variable for the type of facility, training in mentoring, and professional registration, as shown in Table 7.11.

Table 7.11 Showing the demographic characteristics and Negative mentoring experiences.

Variable	Category	Lack of mentor Expertise					Mismatch between the dyad				
		Frequency	Mean	t-test	df	P value	Frequency	Mean score	t-test	df	P value
Gender	Male	91	2.19	-1.02	298	0.308	89	3.50	3.10*	132.8	0.002
	Female	209	2.28				209	3.83			
Qualification	No Degree	183	2.31	1.68*	214.5	0.094	183	3.80	2.06*	201.5	0.041
	Has a degree	118	2.17				116	3.60			
Experience	5 and less years	126	2.14	2.659	290	0.008	124	3.62	-1.99*	220.8	0.047
	More than 5 years	166	2.35				166	3.81			
Type of facility	Public hospital	235	2.31	2.87	296	0.004	234	3.73	0.125	294	0.900
	Private hospital	63	2.03				62	3.71			
Training in mentoring	No	164	2.31	1.612	299	0.108	163	3.77	0.935	297	0.350
	Yes	137	2.18				136	3.68			
		Frequency	Mean	F-test	df	P value	Frequency	Mean score	F-test	df	P value
Profession registration	Nurse	183	2.25	0.133**	2,	0.875	181	3.73	0.570**	2,	0.567
	Midwife	70	2.27		108.9		70	3.66		111.8	
	Both	48	2.21				48	3.73			

Showing test statistic for equal variances not assumed due to *Levene's test being significant or **the unequal sample size among groups (Welch's test)

7.4.1.3 Perceived cost of mentoring

Three variables: Risk to Reputation, Nepotism and Mentoring Effort were related to the Perceived Cost of Mentoring.

Risk to Reputation: For *Risk to Reputation*, the participants that had a degree had significantly lower scores on the Risk to Reputation variable ($M = 4.45$ $SD=1.45$) than those that had no degree ($M = 4.82$, $SD=1.46$), $t(297)=2.17$, $p=0.031$. The difference between these two groups was of small effect ($d=0.257$, 95%CI [0.023 – 0.490]). There were no significant differences between/among groups for gender, experience, type of facility, and professional registration, as shown in Table 7.12.

Nepotism: Females had significantly higher scores on the *Nepotism* variable ($M= 3.84$ $SD=1.43$) than males ($M= 3.35$ $SD=1.43$) $t(294) =2.72$ $p=0.007$. This difference was of medium effect ($d=0.346$ 95%CI [0.094 — 0.596]). There were no significant differences between/among groups for qualification, experience, type of facility, and professional registration, as shown in Table 7.12.

Mentoring Effort: The participants that had a degree also had a significantly lower score on the *Mentoring Effort* variable ($M = 3.21$, $SD=1.47$) than those that had no degree ($M = 3.81$, $SD=1.47$), $t(295)=3.42$, $p<0.001$. The difference between these two groups was of medium effect ($d=0.408$, 95%CI [0.171 – 0.643]). The participants with more than 5 years of experience had significantly higher scores on the *Mentoring Effort* variable ($M = 3.78$, $SD=1.55$) than those that had 5 or less years of experience ($M = 3.28$, $SD=1.37$), $t(278.0)=2.92$, $p=0.004$. The difference between these two groups was of medium effect ($d=0.341$ 95%CI [0.105 – 0.575]). There were no significant differences between/among groups for gender, type of facility, and professional registration, as shown in Table 7.12.

Table 7.12 Showing the demographic characteristics and Perceived Cost of Mentoring.

Variable	Category	Risk to Reputation					Nepotism					Mentoring Effort				
		Frequ ency	Mean	t-test	df	P value	Frequ ency	Mean score	t-test	df	P value	Frequ ency	Mean score	t-test	df	P value
Gender	Male	90	4.46	1.57	296	0.117	88	3.35	2.72	294	0.007	88	3.39	1.51	294	0.132
	Female	208	4.75				208	3.84				208	3.67			
Qualifica tion	No Degree	182	4.82	2.17	297	0.031	182	3.75	1.01	295	0.315	182	3.81	3.42	295	<0.001
	Yes degree	117	4.45				115	3.58				115	3.21			
Experien ce	≤ 5 years	125	4.77	1.13	289	0.260	123	3.71	0.361	287	0.718	123	3.28	2.92*	278.0	0.004
	>5 years	166	4.57				166	3.65				166	3.78			
Type of facility	Public	234	4.71	0.884	294	0.377	232	3.73	0.742	292	0.459	232	3.63	0.961	292	0.338
	Private	62	4.52				62	3.58				62	3.42			
Training mentorin g	No	163	4.72	0.634	297	0.526	161	3.80	1.357	295	0.176	161	3.55	0.449	295	0.654
	Yes	136	4.61				136	3.57				136	3.63			
		Frequ ency	Mean	F-test	df	P value	Frequ ency	Mean score	F-test	df	P value	Frequ ency	Mean score	F-test	df	P value
Professi on registrati on	Nurse	181	4.67	0.681**	2,	0.508	180	3.67	0.190*	2,	0.827	180	3.63	0.223**	2,108.	0.801
	Midwife	70	4.81		107.5		70	3.79		106.7		70	3.56		3	
	Both	48	4.48				47	3.64				47	3.59			

Showing test statistic for equal variances not assumed due to *Levene's test being significant or **the unequal sample size among groups (Welch's test)

7.4.2 Mentoring outcomes

Table 7.13 Showing the demographic characteristics and Mentoring outcomes.

Variable	Category	Willingness to participate in mentoring					Intention to stay					Intention to advance career				
		Frequency	Mean	t-test	df	P value	Frequency	Mean score	t-test	df	P value	Frequency	Mean score	t-test	df	P value
Gender	Male	90	6.92	0.152	291	0.879	89	5.40	2.681	291	0.008	90	8.21	1.152*	206.8	0.251
	Female	203	6.87				204	6.44				207	7.89			
Qualification	No Degree	178	6.57	2.23	291	0.027	175	7.06	6.76	290	<0.001	181	7.65	2.94*	291.6	0.004
	Yes degree	115	7.33				117	4.75				117	8.44			
Experience	≤ 5 years	124	6.72	0.844	282	0.399	122	5.48	3.13	281	0.002	125	8.63	4.46*	280.8	<0.001
	> 5 years	160	7.01				161	6.61				164	7.45			
Type of facility	Public	228	6.78	1.170	288	0.243	228	6.38	3.07*	113.8	0.007	232	7.86	1.103	293	0.271
	Private	62	7.26				61	5.20				63	8.24			
Training mentoring	No	160	6.33	3.70	292	<0.001	161	6.32	1.21	291	0.227	163	7.99	0.009	296	0.496
	Yes	134	7.54				132	5.89				135	7.99			
		Frequency	Mean	F-test	df	P value	Frequency	Mean score	F-test	df	P value	Frequency	Mean score	F-test	df	P value
Profession registration	Nurse	182	6.93	2.76**	2, 109.6	0.068	178	6.05	0.531**	2, 111.3	0.589	182	7.72	0.579**	2, 107.2	0.562
	Midwife	65	6.29				67	6.04				68	8.19			
	Both	47	7.49				48	6.52				48	7.99			

Showing test statistic for equal variances not assumed due to *Levene's test being significant or **the unequal sample size among groups (Welch's test)

7.4.2.1 Willingness to participate in future formal mentoring programs.

There were two demographic characteristics for which there was a significant difference in their willingness to participate in future mentoring programs. Firstly, there was a difference between groups for the highest qualification of the participants. The participants that had a degree had a significantly higher willingness to participate in formal mentoring ($M = 7.33$, $SD=2.94$) than those that had no degree ($M = 6.57$, $SD=2.77$), $t(291)=2.23$, $p=0.027$. The difference between these two groups was of small effect ($d=0.267$ 95%CI [0.031 – 0.502]).

Secondly, the participants that had received training in mentoring had a significantly higher willingness to participate in formal mentoring ($M = 7.54$, $SD=2.69$) than those that had no previous training in mentoring ($M = 6.33$, $SD=2.88$), $t(292)=3.70$, $p<0.001$. The difference between these two groups was of medium effect ($d=0.433$ 95%CI [0.201 – 0.665]). There was also no significant difference among groups for participants' gender, experience, type of facility, training in mentoring, and professional registration. The details of the analyses for *willingness to participate in future formal mentoring* are shown in Table 7.13.

7.4.2.2 Intention to stay.

Findings on differences between groups for intentions to stay working for the hospital in the next five years were primarily significant. Females had a higher possibility ($M= 6.44$ $SD=3.01$) to stay at the hospital than males ($M= 5.40$ $SD=3.11$) $t(291) =2.68$ $p=0.008$. This difference was of medium effect ($d=0.341$ 95%CI [0.090 —0.591]).

The participants that did not have a degree had a higher possibility of staying at the hospital in the next five years ($M = 7.06$, $SD=2.72$) than the participants that had a degree as their highest qualification ($M=4.75$, $SD=3.06$), $t(290)=6.76$, $p<0.001$. The difference between these two groups was of large effect ($d=0.807$ 95%CI [0.563 – 1.05]).

The participants with more than 5 years of experience had significantly higher intentions to stay at the hospital ($M = 6.61$, $SD=2.97$) than those that had 5 or less years of experience ($M = 5.48$, $SD=3.13$), $t(281)=3.13$, $p=0.002$. The difference between these two groups was of medium effect ($d=0.375$ 95%CI [0.138 – 0.612]).

The participant that worked in public hospitals had significantly higher intentions to stay at the hospital ($M = 6.38$, $SD=3.13$) than those that worked in private hospitals ($M = 5.20$, $SD=2.54$), $t(113.8)=3.07$, $p=0.006$. The difference between these two groups was of small to medium effect ($d=0.392$ 95%CI [0.108 – 0.676]). There were no differences between/among

groups for *receiving training in mentoring* and *professional registration*, as shown in Table 7.13.

7.4.2.3 Intention to advance career.

The independent t-test statistics showed no significant differences between groups for gender and type of facility. There were no significant differences among groups for professional registration as well. However, the t-tests were significant between the groups for qualification $t(291.6) = 2.94, p=0.004$. The results showed that nurses/midwives with a bachelor's degree ($M=8.44, SD=1.94$) had a higher possibility of career advancement than nurses/midwives without a degree ($M=7.65, SD=2.65$), and the difference between the two groups was of medium effect ($d=0.327$ [95%CI 0.093 – 561]). Furthermore, the independent t-tests were significant between the groups for experience $t(280.8) = 4.46, p<0.001$. The results showed that nurses/midwives with 5 or less years of experience ($M=8.63, SD=1.78$) had a higher possibility of career advancement than nurses/midwives with more than 5 years of experience ($M=7.45, SD=2.73$), and the difference between the two groups was of medium effect ($d=0.501$ [95%CI 0.265 – 737]). The details of the analysis are shown in Table 7.13.

7.5 Multivariate analyses: multiple regression and mediation analysis

This section examined the impact of mentoring experiences on the three expected mentoring outcomes: willingness to participate in future mentoring programs, intention to stay working for the same hospital, and intentions to advance a career.

The independent variables were in three groups. The demographic variables were entered into the regression models as control variables. The control variables included: Gender — male/female, experience—5 years and less/more than 5 years, qualification—No bachelor's degree/has a bachelor's degree, facility —public/private, and Training in mentoring—no/yes. The explanatory variables were variables based on the theories used in the study, with the hypothesis that these variables explain mentoring outcomes. These variables included collective reciprocity, direct reciprocity, negotiated exchange, perceived organisation support, and self-efficacy. The third set of variables was the mentoring experience variables which included individual influence, relational quality, lack of mentor expertise, and mismatch between the dyad.

7.5.1 Willingness to participate in future formal mentoring programs.

With the willingness to participate in future mentoring programs as the dependent variable and all the other variables as independent variables, the researcher analysed the variables for multicollinearity and multivariate outliers. Multicollinearity arises from highly correlated independent variables (Tabachnick & Fidell, 2021). According to Table 7.9, the correlations were below the 0.8 threshold. Furthermore, tolerance levels were above 0.1, and the Variance Inflation Factor (VIF) were below the acceptable threshold of 10 (Tabachnick & Fidell, 2021). Multivariate outliers were analysed using the standardised residuals (Polit & Beck, 2021) and cook's distance. The standardised residuals were between ± 3 , as shown in Figure 7.4, and the standardised residuals were in acceptable limits of skewness -0.708 (0.140) and kurtosis -0.088 (0.279). The preliminary analysis showed the data appropriate for multiple regression.

The researcher performed hierarchical regression with three outcome models for the analysis in Table 7.14. In the first regression model, control variables were added as independent variables. The model was significant $F(4, 296) = 4.33, p=0.002$. The overall R^2 from the control variables was low, $R^2=0.055$, adjusted $R^2 = 0.043$. Two of the four control variables were significant: qualification $B=0.756, t=2.20, p=0.029$ and training on mentoring $B=1.059, t=3.21, p=0.001$.

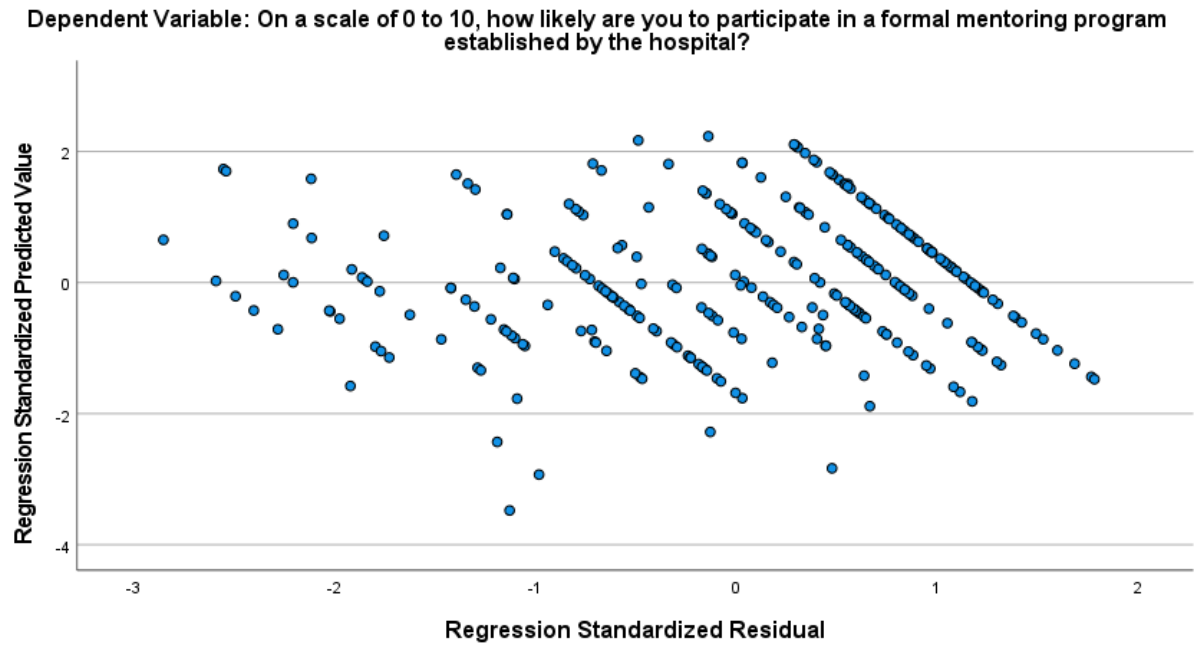


Figure 7.4 Showing scatter plot for the Willingness to participate in future formal mentoring programs.

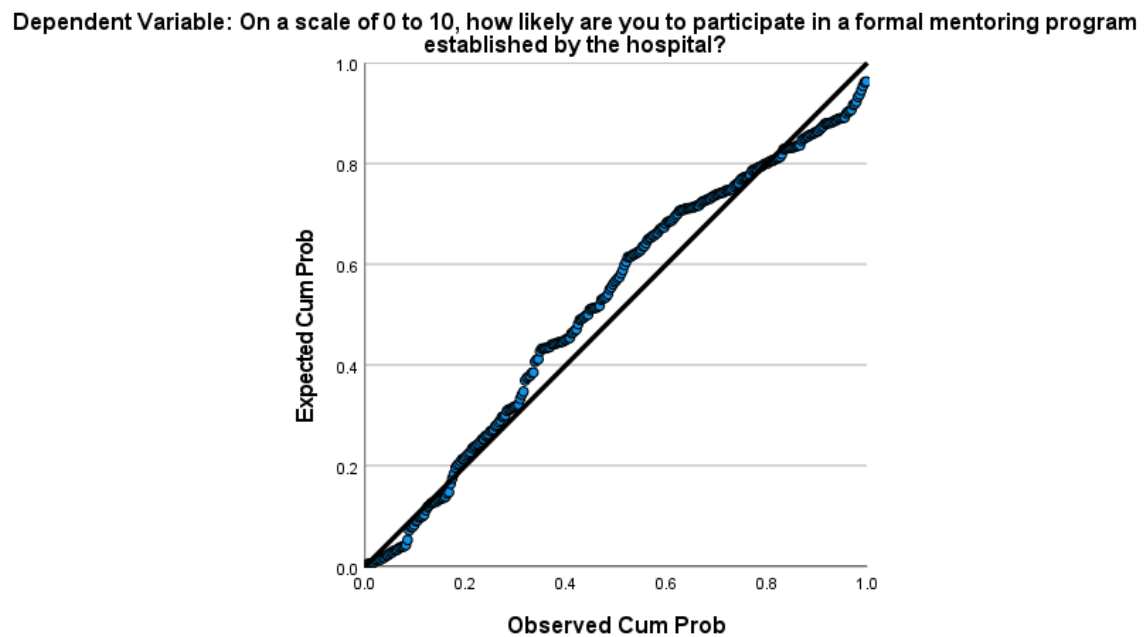


Figure 7.5 P-P plot of Regression Standardised Residual.

The second model consisting of control and explanatory variables was significant $F(12, 288) = 3.90, p < 0.001$. The overall R^2 from the second model was better than in model one $R^2 = 0.140$, adjusted $R^2 = 0.104$. Two explanatory variables were significant: qualification Negotiated Exchange Orientation $B = -0.329, t = -2.42, p = 0.016$, and Perceived Organisation Support $B = 0.432, t = 3.04, p = 0.003$.

The third model consisting of control, explanatory and mentoring variables was also significant $F(16, 284) = 3.27, p < 0.001$. Although the overall R^2 from the third model was better than in model two $R^2 = 0.156$, adjusted $R^2 = 0.108$, the R^2 change was not significant. None of the mentoring variables significantly predicted *willingness to participate in future formal mentoring programs*.

In summary, the three models of the hierarchical regression were all significant, with two control variables, *qualification*, and *training in mentoring*, consistently significant in all three models. Negotiated exchange orientation was also significant in models two and three, while Perceived Organisation Support was only significant in model two. Evaluation of the models (based on the F statistic, Akaike Information Criterion, Schwarz Bayesian Criterion, and R^2 change) showed model two superior to model three. The researcher proceeded to do a mediation analysis to examine whether the significant variable Negotiated exchange orientation and perceived organisation support explain the relationship between mentoring experiences and *willingness to participate in future formal mentoring programs*.

Table 7.14 Hierarchical regression results for Willingness to participate in mentoring programs.

Model		Beta weights: <i>Willingness to participate in future mentoring programs</i>					
		Model 1		Model 2		Model 3	
	Control variables	B	β	B	β	B	β
1	Gender	.255	.041	.310	.050	.298	.048
	Professional experience (in years)	.244	.043	.268	.047	.271	.047
	Qualification	.756	.130*	.797	.138*	.817	.141*
	Training in mentoring	1.06	.186**	.945	.166**	.891	.157**
2	Explanatory variables						
	Risk to reputation			-.070	-.036	-.077	-.040
	Nepotism			-.189	-.095	-.194	-.097
	Mentoring effort			.104	.055	.097	.051
	Collective reciprocity			-.097	-.036	-.133	-.050
	Direct reciprocity			.068	.033	.072	.035
	Negotiated exchange			-.329	-.154*	-.308	-.144*
	Perceived organisation support			.432	.179**	.265	.110
3	General self-efficacy			.336	.050	.061	.009
	Mentoring variable						
	Lack of mentor expertise					.090	.024
	Mismatch between the dyad					-.342	-.081
	Individual Influence					.136	.056
	Relational Quality					.200	.071
	R2 change	.055**		.084***		.016	
	Cumulative R2	.055		.140		.140	
	Adjusted R2	.043		.104		.108	
	F statistic	4.33**		3.90***		3.27***	
	AIC	619.3		607.1		609.5	
	BIC	637.8		655.3		672.5	

*p<0.05, **p<0.01, *** p<0.001 Gender: male 0, female 1. Professional experience: Less than 5 years 0, more than five years 1. Qualification: has no degree 0, has a degree 1. Training in mentoring: No 0 Yes 1,

The mediation analysis was run using PROCESS macro at 5000 bootstraps, and the confidence interval was set at 95% to calculate the indirect effects (Hayes, 2012). The variables *training in mentoring* and *qualification* were controlled for, given that it was significant in all the regression models. The researcher ran the positive and negative mentoring models separately to assess for any indirect relationship between positive mentoring experiences and negative mentoring experiences with *the willingness to participate in mentoring programs*. The positive mentoring model explained 13.7% of the variance in *willingness to participate in mentoring programs*. Figure 7.6 shows the unstandardised beta coefficients of the model. The total effects of *Relational Quality* on *willingness to participate in future formal mentoring programs* (c path: $B = 0.286$, $t(296) = 1.34$, 95% CI [-0.135, 0.707]), $p = 0.182$) and the direct effects (c' path: $B = 0.170$, $t(296) = 0.802$, 95% CI [-0.247, 0.588]), $p = 0.423$) were both non-significant. Both the total effects (c path: $B = 0.298$, $t(296) = 1.61$, 95% CI [-0.066, 0.662]), $p = 0.108$) and direct effects (c' path: $B = 0.181$, $t(296) = 0.940$, 95% CI [-0.198, 0.560]), $p = 0.348$) of *Individual Influence* on *willingness to participate in future formal mentoring programs* were non-significant. Examining each component of the mediation model showed a non-significant relationship between *Relational Quality* and *Perceived Organisational Support* ($B = 0.111$, $t(296) = 1.37$, 95% CI [-0.049, 0.270]) $p = 0.173$) and a positive statistically significant relationship between *Individual Influence* and *Perceived Organisational Support* ($B = 0.415$, $t(296) = 5.92$, 95% CI [0.277, 0.553]), $p < 0.001$). The relationship between *Relational Quality* and *Negotiated Exchange Orientation* was negative and statistically significant ($B = -0.251$, $t(296) = -2.42$, 95% CI [-0.456, -0.047]), $p = 0.016$), whereas the relationship between *Individual Influence* and *Negotiated Exchange Orientation* was not significant ($B = 0.041$, $t(296) = 0.454$, 95% CI [-0.136, 0.217]), $p = 0.651$). Lastly, *Perceived Organisational Support* was positively related to *willingness to participate in future formal mentoring programs* ($B = 0.315$, $t(294) = 2.06$, 95% CI [0.015, 0.615]), $p = 0.040$), whereas *Negotiated Exchange Orientation* was negatively related ($B = -0.323$, $t(294) = -2.71$, 95% CI [-0.558, -0.089]), $p = 0.007$) *willingness to participate in future formal mentoring programs*. We adjusted for qualification and training in mentoring in the model. In the positive mentoring model, the indirect effects were statistically significant: *Relational Quality* on *willingness to participate in future formal mentoring programs* via *Negotiated Exchange Orientation* ($B = 0.081$, 95% CI [0.008, 0.183]), and *Individual Influence* via *Perceived Organisational Support* ($B = 0.131$, 95% CI [0.011, 0.283]).

Multiple regression analyses were also conducted to assess each component of the negative mentoring mediation model (Figure 7.7). In this model, *lack of mentor expertise* had a statistically significant total effects ($B = -0.639$, $t(296) = -2.48$, 95% CI $[-1.15, -0.132]$, $p = 0.014$), but a non-significant direct effects ($B = -0.410$, $t(296) = -1.57$, 95% CI $[-0.923, 0.103]$, $p = 0.117$) on *willingness to participate in future formal mentoring programs*. Both the total (c path: $B = 0.041$, $t(296) = 0.179$, 95% CI $[-0.412, 0.495]$, $p = 0.858$) and direct (c' path: $B = 0.111$, $t(296) = 0.496$, 95% CI $[-0.331, 0.553]$, $p = 0.621$) effects of *mismatch between the dyad* on *willingness to participate in future formal mentoring programs* were non-significant. It was also found that *lack of mentor expertise* was negatively and statistically significantly associated with *Perceived Organisation Support* ($B = -0.515$, $t(296) = -4.93$, 95% CI $[-0.720, -0.309]$, $p < 0.001$), while the relationship between *mismatch within the dyad* and *Perceived Organisation Support* was not significant ($B = -0.096$, $t(296) = -1.03$, 95% CI $[-0.280, 0.088]$, $p = 0.305$). The relationship between *lack of mentor expertise* and *Negotiated Exchange Orientation* ($B = 0.083$, $t(296) = 0.665$, 95% CI $[-0.163, 0.329]$, $p = 0.507$), and between *mismatch within the dyad* and *Negotiated Exchange Orientation* ($B = 0.096$, $t(296) = 0.862$, 95% CI $[-0.124, 0.316]$, $p = 0.390$), was non-significant. Lastly, results indicated that the mediators, *Perceived Organisation Support* ($B = 0.391$, $t(294) = 2.75$, 95% CI $[0.111, 0.670]$, $p = 0.006$) and *Negotiated Exchange Orientation* ($B = -0.337$, $t(294) = -2.85$, 95% CI $[-0.571, -0.104]$, $p = 0.005$), were both statistically significantly associated with *willingness to participate in future formal mentoring programs*. Examining the negative mentoring model for indirect effects revealed an indirect relationship between *lack of mentor expertise* and *willingness to participate in future formal mentoring programs* via *Perceived Organisation Support* ($B = -0.201$, 95% CI $[-0.399, -0.056]$), indicating complete mediation. This model accounted for 11.2% of the variance in willingness to participate in mentoring.

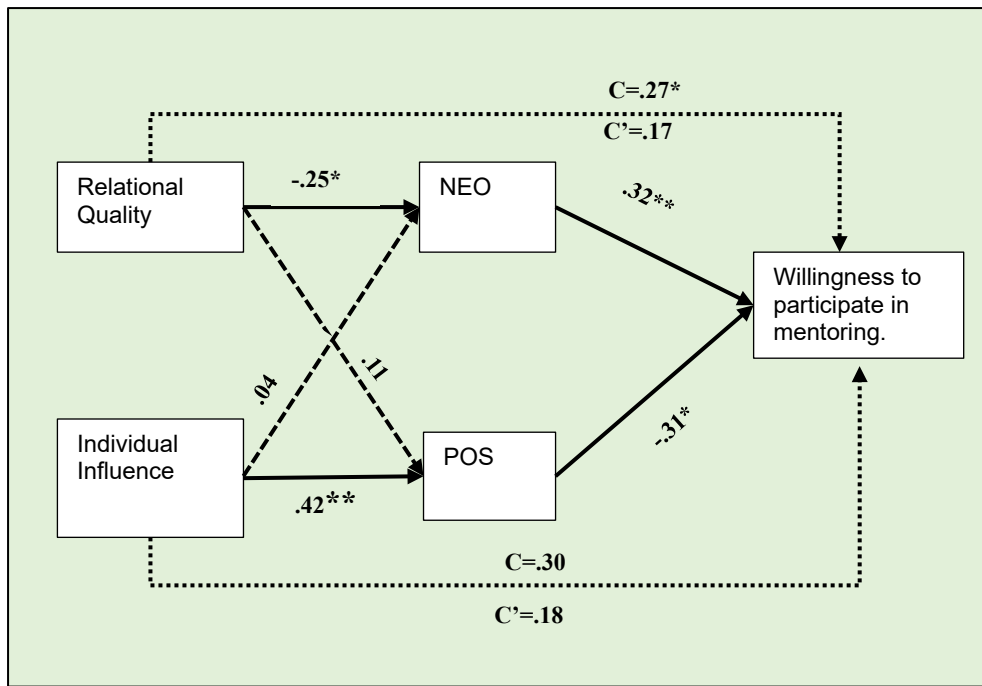


Figure 7.6 Showing the mediation analysis results for the positive mentoring model.

Caption: * means $p < 0.05$; ** means $p < 0.01$.

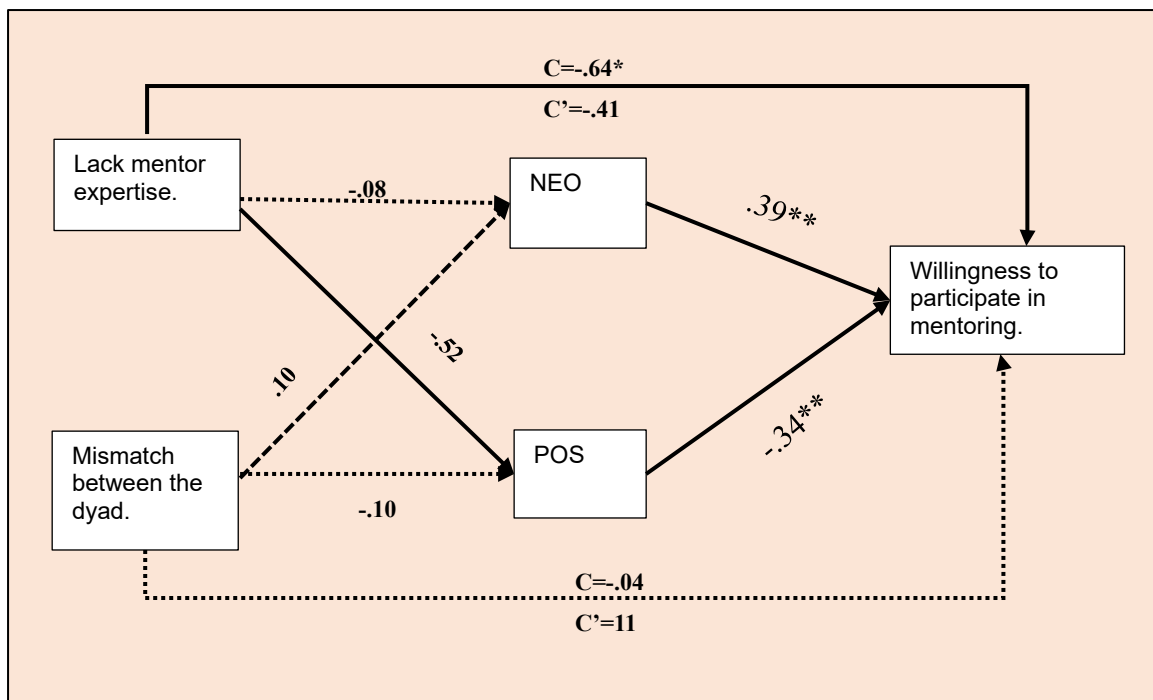


Figure 7.7 Showing the mediation analysis results for the negative mentoring model.

Caption: * means $p < 0.05$; ** means $p < 0.01$.

7.5.2 Intention to stay.

With intention to stay as the dependent variable and all the other variables as independent variables, the researcher analysed the variables for multicollinearity and multivariate outliers. Multicollinearity arises from highly correlated independent variables (Polit & Beck, 2021). According to Table 7.9, the correlations were below the 0.8 threshold. Furthermore, tolerance levels were above 0.1, and the Variance Inflation Factor (VIF) were all below the acceptable threshold of 10 (Tabachnick & Fidell, 2021). Multivariate outliers were analysed by analysing the standardised residuals (Polit & Beck, 2021) and cook's distance. The standardised residuals were between ± 3 , as shown in Appendix 4, and the standardised residuals were in acceptable limits of skewness -0.392 (0.140) and kurtosis -0.487 (0.279). The preliminary analysis showed the data appropriate for multiple regression.

The researcher performed hierarchical regression with three outcome models for the analysis (table 7.16). In the first regression model, control variables were added as independent variables: Gender, experience, qualification, and facility. The model was significant $F(4, 298) = 14.82, p < 0.001$. The overall R^2 from the control variables was 0.166, adjusted $R^2 = 0.155$. Two of the four control variables were significant: qualification $B = -2.05, t = -5.94, p < 0.001$, and type of facility $B = -1.06, t = -2.63, p = 0.009$.

The second model consisting of control and explanatory variables was significant $F(9, 293) = 8.86, p < 0.001$. The overall R^2 from the second model was $R^2 = 0.214$, adjusted $R^2 = 0.190$, and the variables contributed significantly to the model, as evidenced by the significant R^2 change. Two of the five explanatory variables were significant: *Negotiated Exchange Orientation* $B = -0.380, t = -2.76, p = 0.006$ and *Perceived Organisation Support* $B = 0.313, t = 2.21, p = 0.028$.

The third model consisting of control, explanatory and mentoring variables was also significant $F(13, 289) = 6.49, p < 0.001$. Although the overall R^2 from the third model was better than in model two $R^2 = 0.226$, adjusted $R^2 = 0.191$, the R^2 change was not significant. None of the mentoring variables significantly predicted *intentions to stay* working for the same facility in the next five years.

In summary, the three models of the hierarchical regression were all significant, with two control variables, *qualification*, and *training in mentoring*, consistently significant in all three models. Negotiated exchange orientation was also significant in both models two and three, while perceived organisation support was only significant in model two. Evaluation of the

models (based on the F statistic Akaike Information Criterion, Schwarz Bayesian Criterion, and R^2 change) showed model two superior to model three, as shown in Table 20, and proceeded to do a mediation analysis to examine whether the contribution of *Negotiated Exchange Orientation* and *Perceived Organisation Support* in explaining the relationship between *mentoring experiences* and *intentions to stay* working for the same facility in the next five years. The results showed that neither *Negotiated Exchange Orientation* nor *Perceived Organisation Support* mediated the relationship between mentoring experiences and *intentions to stay* working for the same facility in the next five years.

Table 7.15 Hierarchical regression for Intention to stay working for the same hospital in the next five years.

Steps		Beta weights: Intention to stay					
		Model 1		Model 2		Model 3	
1	Control variables	B	β	B	β	B	β
	Gender	0.425	0.064	0.402	0.061	0.394	0.060
	Experience	0.512	0.083	0.576	0.094	0.578	0.094
	Qualification	-2.05	-0.329***	-2.08	-	-2.06	-0.330***
	Facility	-1.06	-0.143**	-1.18	0.333***	-1.19	-0.161**
2	Explanatory variables						
	Collective reciprocity				0.071	0.171	0.060
	Direct reciprocity				0.101	0.225	0.101
	Negotiated exchange				-0.166**	-0.374	-0.163**
	Perceived organisation support				0.120*	0.161	0.062
	General self-efficacy				0.023	-0.411	-0.057
3	Mentoring variable						
	Lack of mentor expertise					0.146	0.036
	Mismatch between the dyad					-0.336	-0.074
	Individual Influence					0.234	0.090
	Relational quality					0.028	0.009
	R2 change	0.166		0.048		0.012	
	Cumulative R2	0.166		0.214		0.226	
	Adjusted R2	0.155		0.190		0.191	
	F statistic	14.82		8.86		6.49	
	AIC	628.6		620.7		624.0	
	BIC	647.2		657.8		676.0	

*p<0.05, **p<0.01, *** p<0.001 *p<0.05, **p<0.01, *** p<0.001 Gender: male 0, female 1. Professional experience: Less than 5 years 0, more than five years 1. Qualification: has no degree 0, has a degree 1. Facility: public hospital 0, private hospital 1

7.5.3 Intention to advance career.

With intention to advance career as the dependent variable and all the other variables as independent variables, the researcher analysed the variables for multicollinearity and multivariate outliers. Multicollinearity arises from highly correlated independent variables. According to Table 9, the correlations were below the 0.8 threshold. Furthermore, tolerance levels were above 0.1, and the Variance Inflation Factor (VIF) were all below the acceptable threshold of 10. Multivariate outliers were analysed by analysing the standardised residuals and cook's distance. Seven participants had standardised residuals above 3; these were deleted. Upon deleting the multivariate outliers, the standardised residuals were within acceptable skewness limits -0.840 (0.142) and kurtosis -0.098 (0.282). The preliminary analysis showed the data appropriate for multiple regression.

The researcher performed hierarchical regression with three outcome models for the analysis (table 7.17). In the first regression model, control variables were added as independent variables: Gender, experience, qualification, and facility. The model was significant $F(4, 291) = 4.86, p < 0.001$. The overall R^2 from the control variables was 0.063, adjusted $R^2 = 0.050$. Only one of the four control variables was significant: Professional experience $B = -0.952, t = -3.60, p < 0.001$.

The second model consisting of control and explanatory variables was significant $F(9, 286) = 5.66, p < 0.001$. The overall R^2 from the second model was $R^2 = 0.151$, adjusted $R^2 = 0.124$, and the variables contributed significantly to the model, as evidenced by the significant R^2 change. One of the five explanatory variables was significant *General Self-Efficacy* $B = 1.32, t = 4.36, p < 0.001$.

The third model consisting of control, explanatory and mentoring variables was also significant $F(13, 282) = 4.09, p < 0.001$. Although the overall R^2 from the third model was better than in model two $R^2 = 0.159$, adjusted $R^2 = 0.120$, the R^2 change was not significant. None of the mentoring variables had a significant relationship with *intentions to advance career* in the next five years.

In summary, the three models of the hierarchical regression were all significant, with one control variable professional *experience*, which was consistently significant in all three models. *General self-efficacy* was also significant in both models two and three. Evaluation of the models (based on the F statistic, Akaike Information Criterion, Schwarz Bayesian Criterion, and R^2 change) showed model two superior to models one and three. The researcher proceeded to perform a mediation analysis to examine whether the significant variable, *General self-efficacy* explained the relationship between mentoring experiences and *intentions to advance career* in the next five years.

Table 7.16 Hierarchical regression for Intention to advance career in the next five years.

Steps		beta weights Intention to advance career					
		Model 1		Model 2		Model 3	
1	Control variables	B	β	B	β	B	β
	Gender	-0.045	-0.010	-0.108	-0.023	-0.050	-0.011
	Experience	-0.952	-0.217***	-0.885	-0.201***	-0.843	-0.192**
	Qualification	0.347	0.078	0.448	0.101	0.423	0.095
	Facility	0.070	0.013	0.129	0.024	0.120	0.023
2	Explanatory variables						
	Collective reciprocity			-0.071	-0.035	-0.084	-0.041
	Direct reciprocity			-0.111	-0.070	-0.088	-0.055
	Negotiated exchange			-0.025	-0.015	-0.032	-0.020
	Perceived organisation support			0.204	0.110	0.153	0.082
	General self-efficacy			1.316	0.257***	1.349	0.263***
3	Mentoring variable						
	Lack of mentor expertise					-0.203	-0.070
	Mismatch between the dyad					-0.100	-0.031
	Individual Influence					0.064	0.035
	Relational quality					-0.54	-0.021
	R ² change	0.063		0.089		0.008	
	Cumulative R ²	0.063		0.151		0.159	
	Adjusted R ²	0.05		0.124		0.120	
	F statistic	4.85		5.66		4.09	
	AIC	451.4		432.0		437.4	
	BIC	469.8		468.9		489.0	

*p<0.05, **p<0.01, *** p<0.001 *p<0.05, **p<0.01, *** p<0.001 Gender: male 0, female 1. Professional experience: Less than 5 years 0, more than five years 1. Qualification: has no degree 0, has a degree 1. Facility: public hospital 0, private hospital 1

Two mediation models were run; the positive mentoring experiences and negative experiences model using 5000 bootstraps and the confidence interval set at 95% to calculate the indirect effects. The variable professional *experience* was controlled for, given that it was significant in all the regression models. The mediation analyses were conducted to assess each component of the positive mentoring model (Figure 7.8). First, it was found that the relationship between *Individual Influence* and *intentions to advance career* ($B = .158$, $t(291) = 1.12$, $p = ns$) along with *Relational Quality* and *intentions to advance career* ($B = .104$, $t(291) = 0.628$, $p = ns$) was not significant. The relationship between *Relational Quality* and *General self-efficacy* ($B = .109$, $t(292) = 3.44$, $p < .001$) was positive and significant. While the relationship between *Individual Influence* and *General self-efficacy* was not significant ($B = .038$, $t(292) = 1.39$, $p = ns$). Lastly, results indicated that the mediator, *General self-efficacy* ($B = 1.13$, $t(291) = 3.78$, $p < .001$), was significantly

associated with *intentions to advance career*. On examining the negative mentoring model for the indirect effects, the results revealed an indirect relationship between *Relational Quality* and *intentions to advance career* ($B = .123$, 95%CI [.033—0.230]). This model explained 12.1% of the variance in *intentions to advance career* in the next five years.

The negative experiences model explained 13.3% of the variance *intention to advance career* (figure 7.9). First, it was found that the relationship between *Lack of mentor expertise* ($B = -.284$, $t(291) = -1.61$, $p = \text{ns}$) along with *mismatch between the dyad* ($B = -.196$, $t(291) = -0.987$, $p = \text{ns}$) and *intentions to advance career* was not significant. The relationship between *the mismatch between the dyad* and *General self-efficacy* ($B = -.173$, $t(292) = -4.52$, $p < .001$) was negative and significant. While the relationship between *Lack of mentor expertise* and *General self-efficacy* ($B = .152$, $t(292) = 4.48$, $p < .001$) was positive and significant. Lastly, results indicated that the mediator, *General self-efficacy* ($B = 1.28$, $t(291) = 4.34$, $p < .001$), was significantly associated with *intentions to advance career*. On examining the negative mentoring model for the indirect effects, the results revealed that there was an indirect relationship between *a mismatch between the dyad* and *intentions to advance career* ($B = -.068$, 95%CI [-.120— -0.028]) as well as that between *Lack of mentor expertise* and *intentions to advance career* ($B = .194$, 95%CI [.070— 0.344]) were both significant.

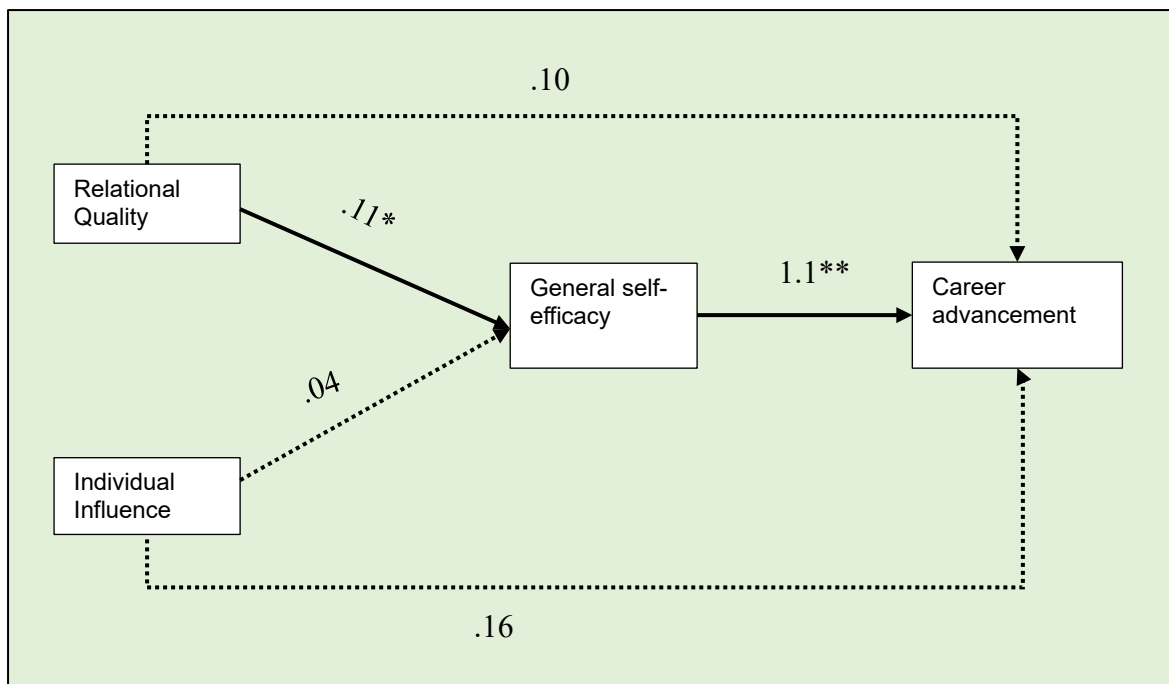


Figure 7.8 Showing the mediation analysis results for the positive mentoring model.

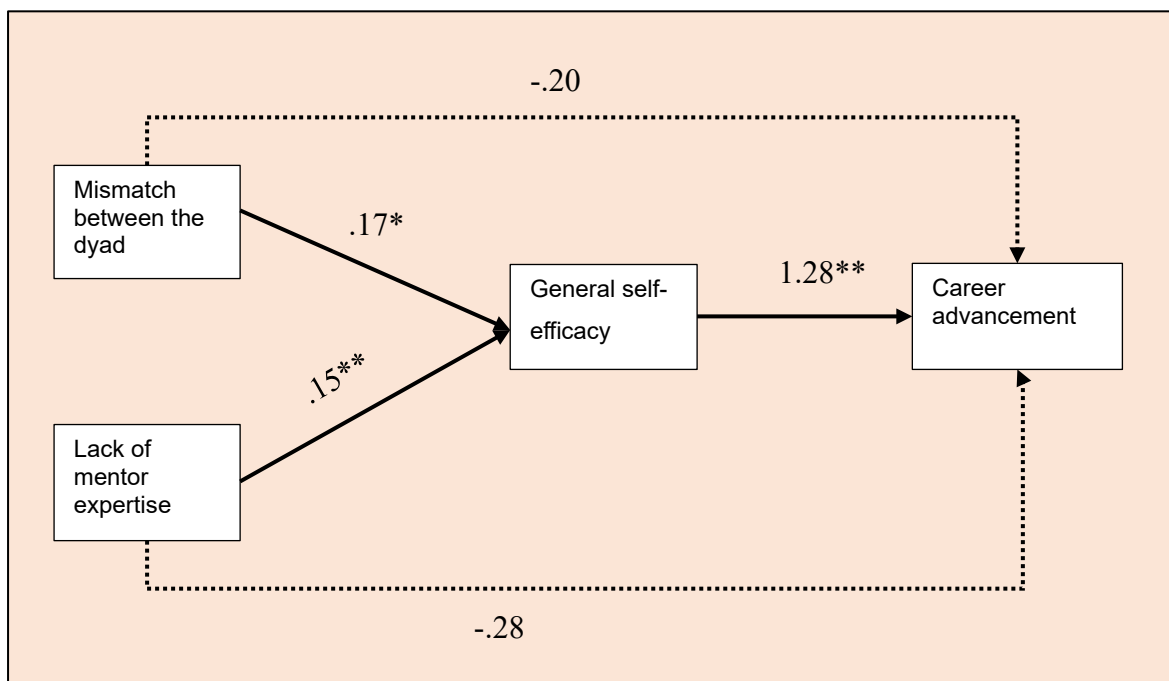


Figure 7.9 Showing the mediation analysis results for the negative mentoring model.

7.6 Summary of the major findings

The study recruited nurses and midwives working in hospitals in Uganda. On average, the participant was 33.4 years of age, having worked within the profession for 8.6 years. Most were nurses with their highest qualification as a diploma or certificate and mostly worked in public hospitals.

Nurses and midwives enjoyed high-quality mentoring relationships based on high scores on the *Relational Mentoring Index's Individual Influence* and *Relational Quality* factors. The distribution of the quality of the mentoring relationships was not significantly different among the demographic groups.

Nurses and midwives experienced negative mentoring as measured by the *Lack of mentor expertise* and *the Mismatch between the dyad*. Four demographic groups were of importance in negative mentoring: nurses and midwives who had been in the profession for more than five years, and those that worked for public hospitals were more likely to experience a *lack of mentor expertise* than their counterparts. *The mismatch between the dyad* was experienced more among female participants, participants without a bachelor's degree, and those with more than five years of professional experience.

Overall, participants' perceptions of mentoring as a costly endeavour were low to moderate on all three factors. Nurses and midwives without a bachelor's degree perceived mentoring to be a significant *risk to their reputation* and thought mentoring took a lot of *effort*. *Mentoring effort* scores were also higher for nurses with more than 5 years of professional experience. Females, more than males, on the other hand, perceived mentoring as a form of nepotism in the organisation.

Positive mentoring and negative mentoring perceived cost of mentoring do not appear to directly predict willingness to participate in mentoring programs, intention to stay working for the same organisation, and intentions to advance career. Mentoring through theoretical constructs of *perceived organisation support* and *negotiated exchange orientation* had an indirect effect on *willingness to participate in mentoring programs*. While the indirect effect of mentoring on *intentions to advance career* was of significance via *general self-efficacy*.

CHAPTER 8: QUALITATIVE PHASE METHODS

8.1 Chapter Introduction

The previous chapters described and presented the methods and results for phase one of the study. The results showed that nurses and midwives experienced high-quality mentoring relationships and some negative experiences which did not directly impact mentoring outcomes, such as willingness to participate in future mentoring programs, intentions to stay working with the same organisation, and intentions to advance their careers. In the proceeding chapters, the researcher explained these findings and along identify the contextual factors in mentoring relationships. This chapter, therefore, describes the design and methods used for phase two of the mixed methods study.

This phase of the study aimed to understand the perceptions and expectations of nurses and midwives with mentoring in hospital settings in Uganda. The study objectives were:

- To explore the mentoring processes and experiences nurses/midwives engaged within hospital settings in Uganda.
- To explore enablers and challenges to mentoring for nurses/midwives in hospital settings in Uganda
- To explore perceived benefits and costs of engaging in mentorship in the workplace.

8.2 Research design

This phase of the mixed methods study used the qualitative descriptive design. Qualitative descriptive design is used when the researcher requires straightforward answers to research questions (Doyle et al., 2020; Sandelowski, 2000). A naturalistic design allows the research to remain grounded in the data (Kim et al., 2017; Sandelowski, 2000, 2010). The qualitative descriptive design allows the researcher to remain close to the data allowing for the description and interpretation of participant experiences and perceptions. Furthermore, Qualitative descriptive design is appropriate for mixed methods designs that use qualitative methods to explain results from quantitative studies (Doyle et al., 2020). Still grounded in pragmatism, phase two of the Mixed Methods study will use qualitative description to

describe and explain nurses' and midwives' experiences with mentoring and how these influence their decision to engage in formal mentoring programs.

8.3 Participant selection

Participant selection and sampling is the first opportunity for integration in a sequential explanatory mixed methods design. This design aimed to generate findings in phase two that complement and explain phase one results (Creswell, 2021). Findings from phase one indicated that mentoring exists among the nurses and midwives working in the hospitals in Uganda. Therefore, the goal is to use a different research method to seek an understanding of the same research question. Phase one results also showed that mentoring experiences are significantly different among groups based on gender, qualification, registration, and type of facility. In order to explore these results, maximum variation sampling will be used to generate findings that vary across these demographic characteristics.

Furthermore, mentoring is experienced differently for junior and senior nurses and midwives (Kakyo et al., 2021). Maximum variation sampling is a sampling strategy in which participants are purposively selected to cater for variations in the phenomenon of interest (Polit & Beck, 2021). It is recommended that in sequential mixed methods research, the sample for phase two is drawn from the sample of phase one. However, phase one of the study used an anonymous online survey, making it difficult to track the participants. A sampling frame that draws from the same population as phase one was carefully done to recruit participants with the characteristics found significant in phase one. Participants were drawn to ensure representation of gender, qualification, type of professional registration, and seniority.

With maximum variation sampling, the study recruited 35 participants: 14 junior staff, 17 mentors, and four nurse executives. There are no specific formulae to arrive at sample size in qualitative studies. Most scholars recommend enough participants to explore the phenomenon of interest (Doyle et al., 2020; Polit & Beck, 2021). Junior staff were interviewed with the understanding that they receive mentoring from a colleague in the mentoring relationship. Senior staff were interviewed because they were primarily mentoring other nurses and midwives.

In terms of gender, of the 35 participants, 10 were males, and 25 were female. They had worked in the clinical setting for periods ranging from 3 months to 32 years, showing a

variation in expertise. Six of the participants had a Master of Science in nursing, which was either in midwifery & Women's Health or critical care nursing. The rest of the participants had bachelor's degrees in nursing or midwifery (n=15); or a diploma in nursing or midwifery (n=13), while one had a nursing certificate. Regarding their registration, the majority of the participants were nurses (n=20), while others were midwives (n=6), and others were registered both as nurse and midwife (n=9). Details of the participants are presented in figures 8.1 to 8.3.

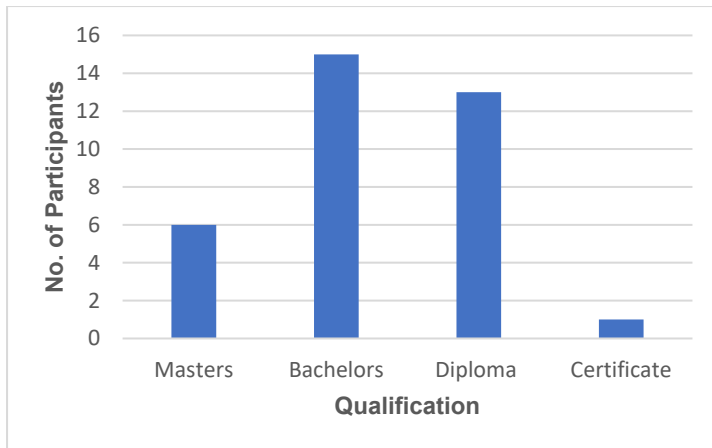


Figure 8.1 Qualifications of the participants.

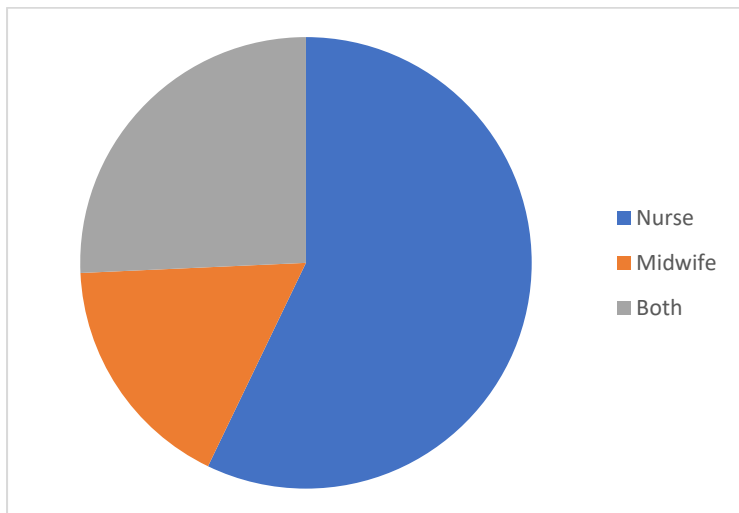


Figure 8.2 Professional registration of the participants.

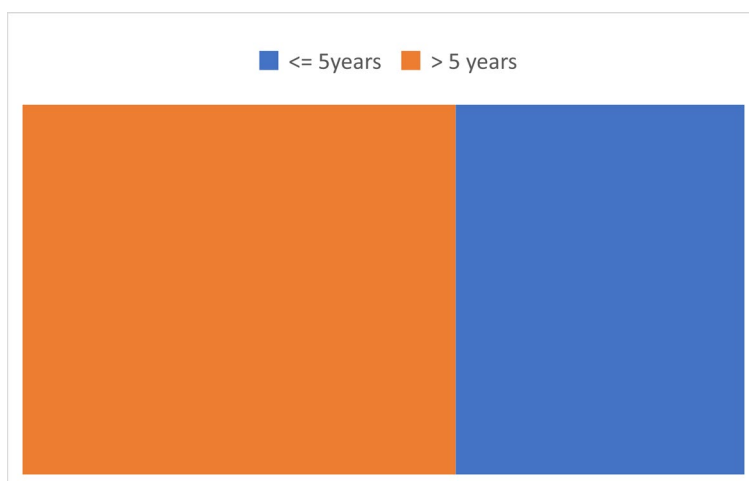


Figure 8.3 Participants' years of professional experience.

8.4 Context of the study

This study recruited participants from three hospitals. The first hospital, Hospital A, is one of 13 regional referral hospitals and is located in the western part of Uganda. It is situated 320km from the capital Kampala. The hospital consists of 14 units with an average bed capacity of 350. It serves people from the neighbouring countries as well as the eight neighbouring districts and includes areas with more than six different dialects. The second hospital, Hospital B, is also a regional referral hospital located in the North-western part of Uganda. It serves people from eight Ugandan districts as well as the Democratic Republic of Congo and South Sudan (MOH, 2022). The second hospital is located 496km from the capital Kampala. The third hospital, Hospital C, is a teaching hospital providing specialised services to the greater Northern region of Uganda. The hospital is located 342km from the capital Kampala and has six departments.

These three sites were chosen for two main reasons. Firstly, they are public hospitals. In phase one of the study, 79% of the participants worked in public hospitals. This aligns with government reports that most healthcare workers are employed by the government, working in public hospitals (Ministry of Health, 2019). Secondly, selecting three hospitals located in three different geographical regions of the country would ensure diversity and representation in person and context.

Overall, 13 participants from Hospital A, 11 from Hospital B, and ten from Hospital C participated in the study, as shown in Figure 8.4.

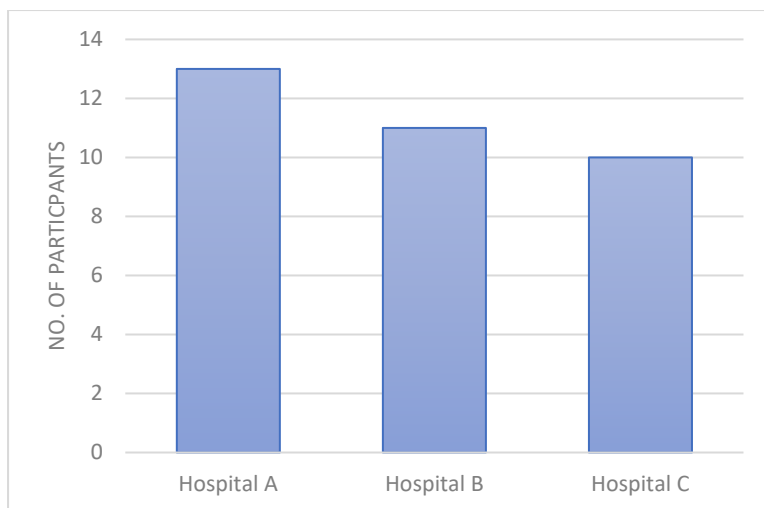


Figure 8.4 Data collection sites to reflect context of the study.

8.5 Data collection methods

Individual in-depth interviews were conducted with nurses and midwives working in the three hospitals. In-depth interviews are qualitative self-report methods of data collection (Polit & Beck, 2021). The researcher uses semi-structured interviews to guide the participant in a discussion about the phenomenon of interest (Rubin & Rubin, 2011). The interview protocol provided another opportunity for integration in a sequential mixed methods design (Creswell, 2021). Semi-structured interviews allowed the participants to communicate their experiences while allowing the researcher to collect data within the limits of the research objectives.

An interview guide was used to collect data. The systematic review had not retrieved any studies regarding mentoring in Uganda (Kakyo et al., 2021), and the researcher thought it necessary to use a vignette in the data collection process. A vignette provided a brief idea of the phenomenon of mentoring (Erfanian et al., 2020). This was done to delineate mentoring relationship experiences from other workplace relationships, such as workplace friendships or supervisor-subordinate relationships. The names used in the vignette are pseudo-names. The illustration of the vignette used in this study is shown in Figure 8.5.

Based on the integration principles used in this study (Creswell, 2021), the interview guide was designed to reflect the quantitative data analysis outcomes, which showed mentoring experiences and their impact on outcomes such as career and future formal mentoring programs. The first part of the interview consisted of general questions about mentoring, focusing on how the participants perceived mentoring as mentors or mentees. The participants were asked to reflect on the vignette and discuss how they initially connected with their mentors or mentees, the frequency of their meetings, and the specific mentoring activities that took place within their relationships. The subsequent set of questions explored the influence of mentoring on various outcomes, including career advancement, socialization, and willingness to participate in future mentoring programs. Each outcome was examined comprehensively, investigating the specific ways in which mentors or mentees impacted the participants' careers, as well as the desirable qualities and characteristics they sought in potential mentors or mentees for future programs. The third section explored factors that enabled or impeded the relationship and mentoring activities.

The vignette

Asikidi is a senior midwife who doubles as a nurse in-charge of labor ward. Asikidi is a mentor to Kamuli who works on the medical ward. The two met ten years ago when Kamuli was newly employed in the hospital and was doing orientation at Asikidi's ward. Asikidi was impressed by Kamuli's passion to care for the mothers and seemed eager to learn. Kamuli occasionally approached Asikidi for help managing the complex cases as she felt overwhelmed. Kamuli admired Asikidi's midwifery skills and how she kept the ward running as she made midwifery practice seamless. Asikidi likewise learned a lot about evidence-based practice from Kamuli. The two often had brief discussions regarding nursing & midwifery practice, workplace politics, relationships with colleagues and peers. Asikidi felt helpful to Kamuli and always looked forward to their interactions. At the end of the Kamuli's orientation, she moved to the medical ward where she had been posted. Kamuli maintained contact with Asikidi, and they often exchange phone calls. They discussed both personal and professional development issues. Asikidi has recommended Kamuli for many hospital trainings. Kamuli has gone on to further her studies and is now pursuing a postgraduate diploma in health service management. Kamuli is now a mentor to new graduates within the hospital and some of her mentees work in different hospitals. Kamuli has kept in touch with Asikidi, and both feel satisfied that their influence in the nursing and midwifery profession has gone on to generations of new nurses.

Figure 8.5 Showing the vignette used during data collection.

For the interviews with nurse executive managers, the interview guide was adapted to include questions regarding their understanding of mentoring and the organisation's perspective on mentoring. This involved exploring the organisation's expectations of both mentors and mentees. Additionally, the interview guide inquired about the availability of organisational resources, including policy guidelines and tangible assets, to support mentoring initiatives. Details of the interview guide are shown in Appendix 12.

8.6 Data collection procedures

Following ethics approvals from Flinders University and TASO research ethics committees, the hospital directors of the three hospitals were contacted to obtain permission to access the potential participants. Upon obtaining permission from the hospital directors, the researcher placed an advert on hospital notice boards calling for participants. The advert contained brief details about the study—the title, purpose, and inclusion criteria for the study. The advert also indicated the researcher's contact address—phone number and email. The participants that called the researcher were evaluated against the inclusion criteria, and arrangements were made for the place and time of the interview. On the agreed-upon day for the interview, the participants were given the vignette and allowed time to reflect on it. Some participants preferred that they return to the researcher for the interview; usually, it was within the same day, except for one participant who asked for a day to reflect on the vignette. All the participants preferred to be interviewed from within the hospital premises. A digital recorder was used to record the interviews. Interviews varied in duration lasting between 25 and 90 minutes. The researcher did all the data collection. The researcher kept a field journal where she captured participants' non-verbal expressions. Immediate ideas arising from the interviews were also noted in the journal. Field journals are an initial step in data analysis, and notes taken during data collection can be helpful during data analysis (Flick, 2014; Tomaszewski et al., 2020). Overall, the data collection process was reflective. While the field journal was critical in reflection and planning for subsequent interviews, the interviews were the core source of the data and formed the central unit of analysis.

8.7 Data analysis

The audiotaped interviews were transcribed (Polit & Beck, 2021) and checked for accuracy by the researcher. The researcher opted to transcribe the interviews herself to allow her to familiarize herself with the data. This allowed the researcher to immerse herself wholly into the data, listening to the audio recordings and repeatedly reading the transcripts. This is the first step in Braun's reflective thematic analysis (Braun & Clarke, 2019; Nowell et al., 2017). Whereas thematic analysis is the process of identifying patterns within a dataset (Braun & Clarke, 2012), reflexive thematic analysis denotes that the researcher is an active entity in this process of analysis (Braun & Clarke, 2019). The reflexive thematic analysis aims to identify themes that can be an explicit or latent representation of the data (Braun & Clarke, 2019). The theme is a central organising concept that provides meaning to a large chunk of data is

the goal in thematic analysis (Braun & Clarke, 2019). Three main characteristics make the thematic analysis different from other qualitative data analysis methods like Qualitative content analysis. Firstly, the researcher is viewed as a storyteller with the mere responsibility of communicating interpretations of the data. Secondly, the process of analysis is iterative, requiring the researcher to move in a back-and-forth process from the data to the codes to the themes back to the data. Lastly, coding follows an open process in which codes identified from the data evolve throughout the analysis as opposed to sticking to a coding framework (Braun & Clarke, 2019).

Once the transcripts were ready, they were exported to NVivo software for coding and file shared with the supervisory team. Consistent with the second step in the thematic data analysis, codes were generated from the dataset. Coding is the process of attaching labels to chunks of data (Braun & Clarke, 2019). In this study, the researcher inductively generated codes from the data set (Braun & Clarke, 2019). Initially, the codes were descriptive (Saldaña, 2021), identifying the topic of discussion within the text. As the analysis advanced, the researcher moved towards pattern coding (Saldaña, 2021), in which the researcher moved between the descriptive codes and the text to identify patterns within the dataset. The process of identifying codes and patterns is aided by researcher memoing (Flick, 2014; Tomaszewski et al., 2020). The researcher kept a journal where reflections on data, codes, and patterns were chatted. Analytical memoing is an essential step towards developing a holistic understanding of a phenomenon (Saldaña, 2021). The supervisory team cross-checked the codes to ensure they were representative of the data.

The final steps of reflexive thematic analysis consist of grouping similar codes to form a theme that aligns with the research question (Braun & Clarke, 2019). Using the supervisors' feedback, the researcher revisited the created themes merging those that were similar and splitting those that appeared different. The researcher ensured that the revised themes represent their constituent codes and reflect the whole dataset and research questions. Within each theme existed a set of subthemes, as shown in Table 7.1. The researcher also defined each theme by providing a description that delineated it from other organising concepts.

Table 8.1 showing a summary of the themes and subtheme generated from the data.

Themes	Sub-themes
1. Beliefs about mentoring	1.1 Mentors are born
	1.2 Help the transition of novices
	1.3 The focus is on the patient/community
	1.4 A focus on self
	1.5 Mentoring for the other
	1.6 Mutuality and fluidity in mentoring
	1.7 Organisation commitment to mentoring
2. The need for mentoring in the clinical settings	2.1 the nature of clinical practice
	2.2 Professional need for mentoring
	2.3 Personal need for mentoring
3. Role of stakeholders	3.1 Roles of the mentor
	3.2 Roles of the mentee
	3.3 Role of the organisation
4. Development of mentoring relationship	4.1 Approaches to Mentor/mentee selection
	4.2 Current mentoring strategies
	4.3 Desirable qualities of stakeholders
5. Mentoring processes	5.1 Responsibility of the mentee
	5.2 Responsibility of the mentor
	5.3 Responsibility of the organisation
6. Positive experiences realised from mentoring	6.1 benefits of mentoring to the mentor
	6.2 Benefits of mentoring to the mentee
	6.3 Benefits of mentoring for the organisation
7. The negative aspects of mentoring	7.1 Negative mentoring experiences
	7.2 Negative experiences don't leave you the same
	7.3 Navigating the negative mentoring experiences
8. Obstacles to mentoring	8.1 Obstacles arising from the organisation
	8.2 Individual barriers to mentoring
9. Opportunities for mentoring	

8.8 Ethical concerns

The study was conducted with concern for human rights and following ethical principles. Ethics approval was sought from the Flinders University Research Ethics Committee, approval no 5313. The study was approved in Uganda by TASO Research Ethics Committee TASOREC/056/21-UG-REC-009 (AMEND), as shown in Appendix 13. During the data

collection process, all the participants preferred to be interviewed within the hospital premises. Thus, interviews were conducted in the hospital's board room, allowing for privacy and away from workstation interruptions. Participants were informed of their right to withdraw from the study at any time without explanation or penalty. Permission to interview the participants was explicitly sought, and consent forms were signed before commencing data collection. In the presentation of findings, identifying information has been removed to protect the identity of the participants. All the data collected is stored in Flinders University computers and servers protected with passwords.

8.9 Rigor and Trustworthiness

Rigor is about conducting research thoroughly and competently (Holloway & Wheeler, 2010; Johnson et al., 2020). Lincoln and Guba developed four-point criteria for ensuring trustworthiness in qualitative research: credibility, dependability, transferability, and confirmability (Polit & Beck, 2021). Dependable research findings are consistent and precise (Johnson et al., 2020). Dependability, also known as auditability, is achieved by leaving a decision trail during the processes of the research, which can be examined and critiqued by other researchers to determine consistency (Devakirubai, 2020; Richardson-Tench et al., 2011). To achieve dependability in this study, the researcher has documented every step of the data collection and analysis in chapters 7, 8, and 9 (Nowell et al., 2017). The researcher generated the codes and themes and checked with the supervisor (LX) while the supervisor (DC) solved the disagreements. The researcher worked with the supervisory team, revisiting the codes and themes during the supervisory meetings.

Credibility means the researcher's findings are consistent with the participants' perceptions (Holloway & Wheeler, 2010; Johnson et al., 2020). A research report is considered credible if the readers or the participants recognise that the experiences described in the report are similar to the participants' lived experiences (Devakirubai, 2020; Richardson-Tench et al., 2011). Credibility was achieved by clarifying meanings with the participants at the end of each interview. Transferability is the potential for the findings to be inferred from similar contexts and participants (Polit & Beck, 2021). This means the extent to which the reader of the research report finds its meanings applicable to their own experiences (Richardson-Tench et al., 2011). Transferability for this study was achieved by describing the characteristics of the participants and the hospitals (see Chapter 9, section 9.1). Where possible, the social

context of the themes has been provided within the sections presenting data (see chapters 9 and 10).

Confirmability means that the findings represent the information provided by the participants, and thus, which has not been created by the researcher (Polit & Beck, 2021). When credibility, transferability, and dependability can be demonstrated in a study, then confirmability has been attained (Devakirubai, 2020; Richardson-Tench et al., 2011).

Confirmability was achieved by using the data collected from the participants and generating themes, sub-themes, and codes. An example of a coding process to demonstrate confirmability is shown in Table 7.2.

Table 8.2 Showing an example of the coding process.

Quotes from transcripts	Codes	Subthemes	Themes
<p><i>“You know medicine changes” P19.</i></p> <p><i>“And mentorship I would encourage people should read, you can’t be mentoring people what you studied over 10years back. No, so you should be up-to-date with the new guidelines, new protocols” P33.</i></p>	Clinical practice is dynamic and complex	The nature of clinical practice	The need for mentoring in the clinical settings
<p><i>“aaah the biggest challenge would be the older generation. These are people who went through the system [clinical practice] before computers were around before internet was prevalent. Now if you are telling them about an online meeting, you have to tell them press [click] here, something you look at as being basic, to them it’s not basic at all” P3</i></p>	Changes in principle over generations		
<p><i>“We feel these people [new graduates] coming to the field they are not getting the teachings we got from their tutors; you know also the tutors are dot com generation. Or it is a personal feeling that I cannot work thoroughly. Most times when mentoring you realise there are many gaps from these students, somebody is about to finish school, but they are going out raw; you don’t have the basics in nursing” P17</i></p>	changing nursing education trends	Professional need for mentoring	
<p><i>“But these young ones, they come on duty when they reach here, they tell you sister, let me reach here [going away from workstation], let me do this, they keep on tossing you. And also, you expect them to do the work, at the end of the day they don’t do it. You don’t know if it’s because they don’t have the knowledge or skill may be doesn’t know the procedure or it’s his own attitude, he wants to dodge the work” P27</i></p>	Declining professional and ethical standards within the profession		
<p><i>“There are things we don’t have to do, the professional conduct, the ethics and things we should do more” P7</i></p>			
<p><i>“You know these days because someone wanted to go for medicine [to be doctor] but their points [high-school scores] are not as high as to secure an admission into medicine. so, the parent says now you go for nursing. Yet their major aim was up in medicine, they will go complete the nursing school, they give them jobs but that is not where wanted to be. For me ...wondering why this person behaves like this., Then you realise that for this person, this is not where he belongs. That is not what they wanted. Even after qualifying and after going through all the ethics ... they still feel they wanted to be the doctors not the nurses. Especially with the gents[males]” P1</i></p>	dwindling passion for the profession		

8.10 Chapter Summary

This chapter presented the design and methods used in phase two of the sequential mixed methods design. Phase two of the study was a qualitative descriptive design; data was collected using a semi-structured interview guide. Data was analysed using reflexive thematic analysis. Deliberate efforts were made to ensure that findings are representative of the participants' experiences by presenting participants' quotes along with respective themes, as shown in chapters 9 and 10 that follow.

CHAPTER 9: PHASE TWO QUALITATIVE FINDINGS

9.1 Chapter Introduction

This qualitative study phase aimed to understand nurse/midwives' experiences with mentoring in hospital settings in Uganda. Using a sequential explanatory mixed methods design, the design of the qualitative phase was informed by findings from the quantitative phase (see Chapter 8). Findings from the qualitative study provide possible explanations for the results of the quantitative phase of the study. This chapter outlines findings from 35 interviews with hospital nurses and midwives in Uganda and the nine themes identified from the interview data.

9.2 Characteristics of participants

The participants worked in three public hospitals in Uganda's Western, northwestern, and Northern parts. There were 13 participants from Hospital A, 11 from Hospital B, and ten from Hospital C who participated in the study. In addition, one participant with experience overseeing these hospitals participated in the study. To protect the identity of the participants, they have been allocated numbers 1 through 35. An outline of the participants' demographic characteristics is shown in Table 9.1.

Overall, 35 participants took part in the study consisting of 10 males and 25 females. They had worked in the clinical setting for periods ranging from 3 months to 32 years. Six of the participants had a Master of Science in nursing, which was either in midwifery & Women's Health or critical care nursing. The rest of the participants had bachelor's degrees in nursing or midwifery (n=15); or a diploma in nursing or midwifery (n=13), while one had a nursing certificate. Regarding their professional registration, the majority of the participants were nurses (n=20), while others were midwives (n=6) or were registered both as nurse/midwife (n=9).

Table 9.1 Showing the participant profile.

Participant	Gender	No. years working as nurse or midwife in clinical settings	Registration	Qualification	Hospital	Experience with formal mentoring
P1	Female	19 years	Nurse	Masters	Hospital A	No
P2	Male	4 years	Midwife	Bachelors	Hospital A	No
P3	Female	9 years	Nurse and midwife	Masters	Hospital A	No
P4	Female	12 years	Nurse and midwife	Masters	Hospital A	No
P5	Male	13 years	Nurse	Masters	Hospital A	No
P6	Female	15 years	Nurse and midwife	Masters	Hospital A	No
P7	Female	2.5 years	Midwife	Bachelors	Hospital A	No
P8	Female	5 years	Midwife	Bachelors	Hospital A	No
P9	Male	3 years	Midwife	Bachelors	Hospital A	No
P10	Male	5 years	Nurse	Diploma	Hospital A	No
P11	Male	8years	Nurse	Diploma	Hospital A	No
P12	Female	4 years	Nurse	Bachelors	Hospital A	No
P13	Female	2 years	Nurse	Bachelors	Hospital B	No
P14	Male	3 years	Nurse	Bachelors	Hospital B	No
P15	Female	5 years	Midwife	Diploma	Hospital B	No
P16	Female	13 years	Nurse	Diploma	Hospital B	No
P17	Female	28 years	Nurse	Diploma	Hospital B	No
P18	Female	21 years	Nurse	Diploma	Hospital B	No
P19	Female	30 years	Nurse	Diploma	Hospital B	No
P20	Female	3 months	Midwife	Bachelors	Hospital B	No
P21	Female	3 months	Nurse	Bachelors	Hospital B	No
P22	Female	31 years	Nurse	Diploma	Hospital B	No
P23	Female	12 years	Nurse and midwife	Bachelors	Hospital B	No
P24	Male	10 years	Nurse	Bachelors	Hospital A	Yes
P25	Female	11 years	Nurse and midwife	Bachelors	Hospital C	No
P26	Female	19 years	Nurse and midwife	Bachelors	Hospital C	No
P27	Female	15 years	Nurse	Bachelors	Hospital C	No
P28	Female	9 years	Nurse	Diploma	Hospital C	No
P29	Female	25 years	Nurse	Certificate	Hospital C	No
P30	Male	1.5 years	Nurse	Diploma	Hospital C	No
P31	Male	5 years	Nurse	Diploma	Hospital C	No
P32	Female	25	Nurse and midwife	Diploma	Hospital C	No
P33	Female	32 years	Nurse and midwife	Bachelors	Hospital C	No
P34	Male	5 years	Nurse	Diploma	Hospital C	No
P35	Female	31 years	Nurse and midwife	Bachelors	Executive Manager—MoH	No

9.3 Outline of findings

Nine themes with 27 sub-themes were identified from the interview data. These themes and sub-themes revealed participants' perceptions of mentoring. The themes of (1) beliefs about mentoring and (2) the need for mentoring in clinical settings reflected participants' views of the purpose of mentoring in clinical settings. The rest of the themes explained the nurses and midwives professed mentoring experiences in five themes described (3) the roles played by different stakeholders, (4) the development of the mentoring relationship, (5) the mentoring processes, (6) positive experiences realised from mentoring, and (7) the negative aspects of mentoring. Table 7.1 outlines the themes and sub-themes of the qualitative study. The participants also highlighted (8) key obstacles to mentoring and (9) internal and external opportunities for mentoring. This chapter detailed themes 1-5, and chapter ten presents themes six to nine.

9.4 Theme 1: Beliefs about mentoring

This theme relates to the participants' beliefs about mentoring in clinical settings and consists of seven subthemes as detailed in the following narration.

9.4.1 Subtheme 1: Mentors are born.

Participants had an interesting belief that *mentors are born*. They used words like 'instinct', 'we have been chosen', 'it's in my nature', 'out- [of the goodness] of the heart', 'calling', and 'heart for it' to describe their innate abilities to mentor others. These beliefs got them through mentoring even without mentorship training and in the absence of external drives to mentor others, as Participant one states:

"I think, mine was an instinct. Once you are already a nurse and a midwife there is that instinct really, I want to see you do it like a nurse, I want to see you do it like a midwife. Aaaaa I think it was just in-built in me that a nurse is supposed to do like this. And I just want to see them moving in the way that" (P-01).

9.4.2 Subtheme 2: Help the transition of novices.

To most participants (n=22), mentoring was believed to be one of the many ways to aid the transition of novices to ensure the continued growth of the profession. Participants stated that professional standards and ethics could only be taught and maintained through mentoring activities such as role-modelling best standards. Mentoring was a way to correct past wrongs within the profession that impacted the societal image of nursing and midwifery practice. To

these participants, at the core of mentoring was the profession. Therefore, it was expected that the nurses and midwives mentor others for the sake of growth and continuity of the profession, as one participant clearly stated: *“Then you put in your mind, these are the future nurses, or these are the future leaders in the time to come like some of us when we retire those ones will be the ones who step in our shoes”* (P-16). The focus on the profession by helping novices in the workforce was the reason nurses and midwives in clinical settings viewed mentoring as a way of *paying it forward*. This was specially emphasised by a midwife:

“If someone had not mentored me, would I have gone through this system well? You say ok let me also mentor someone, let me also do good to someone. And then as you do it, for the first time you are doing it because someone mentored you” (P-03).

9.4.3 Subtheme 3: The focus is on the patient and the community.

More important was the focus on the patient and the larger community from which they hailed. Participants were aware that at the end of the mentoring benefits chain was the patient. The patient was the beneficiary of good mentoring practices *“Because our main core here is to make the patients who are sick to recover; That is the main reason I mentor”* (P-17) or the victim of bad mentoring: *“they don’t do the right thing, life is going to be lost but you don’t know which life is this one”* (P-01). Mentoring was carried out with the ultimate aim of ensuring that patients and the wider community received the highest quality of care when seeking assistance at the hospital. This commitment was driven by the understanding that *“a good nurse is one who can offer quality care to the patient”* (P-29).

9.4.4 Subtheme 4: Mentoring for self.

Another important belief regarding the mentoring held by the participants centred around *mentoring for self*. These nurses and midwives (n=15) saw themselves as the beneficiaries of any outcomes related to mentoring. They engaged in mentoring for two reasons. Firstly, because they needed to be mentored: *“for the human being it means you don’t know and yet you must know and you must have someone to guide you so that you know about it,”* (P-33). Secondly, mentoring was important to protect self. They stated their concern that bad or no mentoring eventually *catches up with you* as participant 24 described:

“As I mentioned that at some point you might land in the hands of that person you were supposed to mentor but either ignored or you didn’t want to share knowledge and this person is practicing their bad skills on you and you can’t do anything about it. I don’t want to be in a situation where you are running away from your students

because you know you did a bad job” (P-24).

9.4.5 Subtheme 5: Mentoring is for the other.

Comparatively, mentoring was viewed by many participants (n=13) as beneficial only to the *other*. The other was usually the junior staff. This mentoring belief portrayed mentoring as a one-way process in which it was the responsibility of the mentor to provide mentoring activities to the benefit of the mentee. This meant that the mentor was the giver, and the mentee was the receiver at all times in the mentoring relationship. This subtheme has traces of hierarchical language in which the mentor was viewed as the parent and the mentee as the child: *“if someone is your mentor, they will be like the second parent. What do parents do? They solve problems from home or work” (P-13).* This had implications for the overall experience of mentoring in the clinical settings. There was emphasis that there was nothing in it [mentoring] for the mentor. The goal was to help the mentee meet their expectations in the clinical settings. Mentoring was viewed as a one-way phenomenon.

9.4.6 Subtheme 6: Mutuality and fluidity in Mentoring

The data revealed a subtheme concerning mutuality in the mentoring relationship and the fluidity of mentoring roles. Participants acknowledged that mentoring involved the exchange of knowledge from senior colleagues to less experienced nurses/midwives. However, the concept of seniority was multifaceted, indicating that the provider of knowledge could also become the recipient under specific circumstances, as one participant wisely cautioned: *“It’s not always that mentors are experts you have to be careful with that. You have to be willing to learn and adjust accordingly” (P22).* Seniority was multifaceted, as it encompassed not only age but also clinical experience. Those with more years of service in the hospital were deemed more senior. Furthermore, level of education played a role in determining seniority; for instance, a nurse with a master's degree held a higher seniority status compared to one with a bachelor's degree. Additionally, the hierarchical structure of the Ugandan health system contributed to variations in seniority, with registered nurses (RNs) ranking higher than enrolled nurses (EN). Moreover, specific skill sets also influenced seniority, as exemplified by Participant 13's elaboration on individuals possessing unique abilities that others struggled to match:

“For a nurse who did a certificate, has been in the hospital more than somebody who has done BSN. Let me just continue with example of cannulation, so this nurse has seen all kinds of patients from the dehydrated ones whose veins have collapsed, she has worked through them.” (P-13).

The fluidity in seniority made mentoring a two-way phenomenon as participant nine elaborates: *“And actually mentoring is either way, even me a junior there are somethings that I know that I can try to mentor your supervisor or so-called experienced person”* (P-09).

Strong personal bonds were valued as the centre of productive mentoring. In fact, for these particular participants (n=12), mentoring was viewed as a relationship as opposed to a process or a set of activities. To them, mentoring was about creating trusting relationships and cultivating relational bonds between self and the other. Having good communication was essential, and neutrality was desirable. It was essential to build a good foundation for a trusting relationship, such as creating a good rapport with the other colleague: *“first of all, it is to create a good rapport with the mentee because without a good relationship we can never mentor”* (P-19). *Some level of similarity was necessary for these bonds stay strong. Participants felt mentoring was best to occur between people in the same profession working in the same geographical area, “me I would think mentoring is ahh getting someone in the same field”* (P-01). In case the dyad differed in professions, they at least had a similar work ethic: *“I have an experience of an obstetrician I worked with, I come ask for consultation on a patient I have done a clerkship. When it’s me, he does not take it lightly because he knows I can do better than that”* (P-02).

9.4.7 Subtheme 7: Organisation’s commitment to mentoring.

The final subtheme on beliefs on mentoring centred on whose responsibility mentoring was. Mentoring only existed if the organisation or hospital administration showed some level of commitment. Mentoring started with the initiation by the organisation; they needed to set the ball rolling: *“Actually, if there is to be something[mentoring], it should be done right from the ministry, so that... because it starts from there”* (P-01). If no mentoring existed in the organisation, then it had everything to do with the organisation capacity to support mentoring: *“Once the management is on board that is like 50% achieved; the other nitty gritty would be what is the structure of mentoring? how can we make it fit your organisation?”* (P-24).

9.5 Theme 2: The need for mentoring in the clinical settings.

Participants discussed the need for continued mentoring and for future formal mentoring programs in three subthemes:

9.5.1 Subtheme 1: The nature of clinical practice requires one to engage in mentoring.

Even though expertise is built over the years of practice, participants acknowledged that a clinician cannot know it all. Clinical practice was considered a complex system managing a complexity of patients that could quickly get overwhelming:

“I remember one time, there is time we lost a mother. She was having postpartum haemorrhage and it wouldn’t stop she had been referred from a health centre 3 to health centre 4 to a regional referral and then it was at round midnight, we had to run around looking for blood, prepare her for theatre, she died before reaching theatre table. it was overwhelming” (P-07).

The complexity in practice meant the nurse/midwife could rely on the mentor for psychosocial support when overwhelmed or on the mentee when the complexity meant a need for more hands. Clinical practice was also described as being dynamic *“you know mentoring, I may be somebody who knows many things, but since medicine keeps changing; there are new things they learn from their institution”* (P-17) and technology was evolving. This required that the nurses and midwives to continuously learn from each other and support one another.

9.5.2 Subtheme 2: Professional need for mentoring

Participants felt that the profession needed continuous mentoring in the clinical area. Firstly, participants were worried about the changing trend in nursing education in which student numbers were overwhelming, clinical placements were shorter, and nursing school programs were more theoretical than practical in their leaning. The evolution of technology meant student were learning in simulated setting with less on-patient experiences. This meant that many nurses and midwives were entering practice without the full set of clinical competencies and these nurses needed mentoring:

“...because now the schools are so many you find someone qualified, and they cannot even cannulate they cannot pass a catheter cannot pass an NG tube and yet someone has trained for 3 years. So I would like to see someone qualifying when he or she has achieved or knows what she supposed to do at the end of the day for the good of the patient” (P-25).

Secondly, the profession encountered a group of new nurses who did not necessarily have a genuine desire to pursue nursing or midwifery; rather, they found themselves in these roles due to circumstantial factors:

“And its like they came to nursing as last resort they are not called as our ethics says.

It is a call, when you are nurse but most of them came as a last resort. They wanted to be people higher than nurses but since they didn't get the chance they came to nursing with less interest in nursing, that is our challenge, its very dangerous. We are scared of the future once we are retired, we don't know what the service will be in the future" (P-17).

It was genuine worry that these new colleagues were at the verge of leaving the vocation due to very low passion for the profession. Without mentoring interventions, the profession would lose these skilled nurses to other profession further affecting the staffing levels at the hospitals. A good example of dwindling passion for the profession was expressed by one of the newly graduated nurses:

"...one can go back to school for basic sciences without necessarily doing [nursing] internship but it's one advantage when you are registered with the [nurses'] council because the [job]adverts can be specific that someone must be registered with the board. So, I am here [for internship] for a mission. It's not that I don't like it [nursing] totally ... but the other part [basic science] weighs more interest compared to this [nursing]" (P-14).

Thirdly, participants were worried about the declining professional standards in clinical practice. Participants felt some nurses/midwives were unsympathetic, contrary to the professional and ethical code of conduct. This was best described by Participant 13, a new nurse at the hospital and newly attached to the medical ward:

"For example... Actually, there was this guy, came through emergency while I was on medical ward, he had hypertension and left side stroke I don't know what transpired through the night, in the morning I was the first to arrive with a student from Arua, when reached she told me there is a patient who needs suctioning, ... The staff on duty came I told her we have this patient, where can we find wheelchair or trolley to transfer him to a place where we can take of him, she simply said "I don't know". You know that response, oh my God, this could be your father, this could be someone's ..." (P-13).

Fourthly, nurse and midwives did not relate well with each other in the clinical settings: "we don't have a nurse's culture that nurse help fellow nurse. We don't have the tradition that nurses help nurses. Everyone is on their own" (P-12). The nurse-to-nurse, midwife-to-midwife relationship at work was complicated with quarrelsome individuals, rudeness, and some colleagues described as being tough and complicated. These relational dynamics created fear and intimidation within the workplace environment:

"The work environment is such that when this person steps in even people who were discussing and talking to each other stop and start to pretend to be busy just to impress that person. The work environment is already dead it's not good people don't

enjoy what they are doing” (P-24).

The other professional issues to demonstrate a need for mentoring practices were related to the increased professional turnover “*Many nurses have opted to leave nursing go for a different thing where you know you can be promoted. Those small issues affect*” (P-22) and the worrying image of nursing in the society: “*Before people thought nurses were school dropouts that were just trained on job but now it’s a profession, it has a registration process. So, when the patient was explained to what it entails to be a nurse*” (P-11).

All these factors affecting the profession emphasised the need for mentoring in the clinical settings.

9.5.3 Subtheme 3: The personal need for mentoring

Nurses/midwives felt the clinical practice could be overwhelming with emotions that only a fellow nurse/midwife could understand as participant six describes:

“It’s a very tasking profession its very energy draining profession, I have seen people break down, people get so weighed down from work and stress. One thing about mentorship is that, you don’t feel the heat of work or the stress of work that much because you have someone you can always talk to” (P-06).

Some participants felt nurses and midwives in the clinical area were not assertive and lacked confidence expressing themselves particularly with interprofessional practice “*You see when someone comes in the hospital, there is that issue people saying that the doctors know it all and yet there are so many nurses who have actually so much to offer. You ask, can someone contribute? They say but the doctor has said, what else can we say?*” (P-03).

All these personal issues were more apparent if the nurse/midwife was new to the profession or to the organisation. Furthermore, nurses and midwives had personal non-work-related problems that had potential to impact their work in the clinical settings. All these issues pointed to the need for mentoring for nurses and midwives:

“The adults don’t want to be on ground, they feel they already know, they have a lot of commitments their minds are on other things, they are torn between, they have personal issues that are interfering with work” (P-26).

While themes one and two centred on the purpose and necessity of mentoring, themes three to seven delve into the comprehensive mentoring experiences of nurses and midwives in

clinical settings. The progression of these mentoring experiences is illustrated in a logical sequence, as depicted in Figure 9.1.

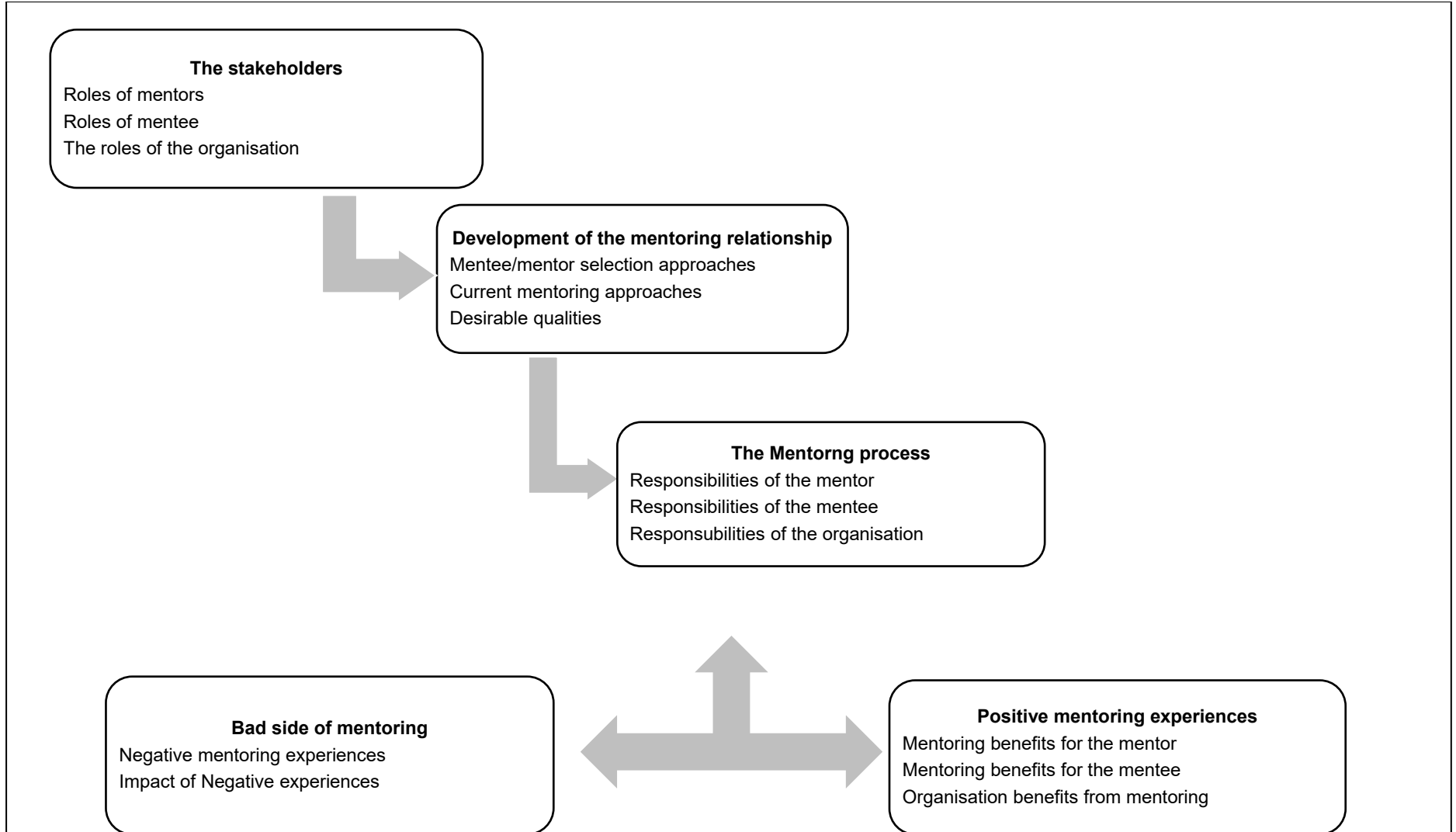


Figure 9.1 Showing diagrammatic presentation of mentoring as described by the nurses and midwives.

9.6 Theme 3: The roles played by the different stakeholders.

The roles of stakeholders in mentoring relationships were not strictly confined to traditional distinctions of mentor, mentee, and the organisation. Instead, nurses and midwives assumed diverse roles within the hospital setting, which led them to act as both mentors and mentees interchangeably. This theme delves into the multifaceted roles played by mentors, mentees, and the organisation, shedding light on their complex interactions and dynamics.

9.6.1 Subtheme 1: The role of the mentor

In the clinical setting, the mentor was typically the nurse or midwife in-charge, also known as supervisors. These individuals served as the first-line managers for the ward or unit. As one participant explained, "in hospitals, they always give you an in charge" (P-34). Additionally, the hospital's hierarchical structure dictated that each cadre of nurse/midwife was senior to the other. The highest-ranking executive in the hospital was the Principal Nursing Officer, followed by the night shift superintendent, Senior Nursing Officer, Nursing Officer, Assistant Nursing Officer, Enrolled Nurse, and finally, nursing assistants. Furthermore, every nurse in the hospital held a role with the potential for assuming the mentor function, wherein they could mentor another colleague.: *"Like in the ministry of health scheme of service where you have certificate nurses. so, like they have diplomas, but they are also mentors in their own roles. Even the other certificate nurses they are mentors"* (P-01). The teaching hospital had similar flow of structure in the hospital although different labels were accorded these roles such as professor, senior lecturer to lecturer and teaching assistants.

9.6.2 Subtheme 2: The role of the mentee

Several words were used to describe mentees in the clinical settings. The collection of words included subordinates, junior nurses, colleagues, nurse/midwifery and medical interns, local and international students, junior manager, deputies to executives. For example, participant 18 describes: *"...the student nurses, the certificate, the diplomas even the university students and the intern doctors"* (P-18)

9.6.3 Subtheme 3: The role of the organisation.

The mentoring process involved three primary entities within the organisation. Firstly, the participants recognised the nursing and midwifery regulatory body as a crucial stakeholder in establishing mentoring relationships. Additionally, two of the hospitals operated as regional referral hospitals under the governance of the Ministry of Health (MOH), while the third

hospital served as a teaching hospital under the governance of the University. Therefore, the MOH and the University were identified as the second stakeholders in fostering mentoring relationships. Lastly, each individual hospital had its own executive management responsible for overseeing the daily operations, thus rendering the hospital itself a significant stakeholder in establishing mentoring relationships.

9.7 Theme 4: development of mentoring relationships.

Through the exploration of mentoring relationship development, three distinct themes emerged from the data: 1) approaches to mentor/mentee selection, 2) current mentoring strategies, and 3) desirable qualities of the stakeholders involved.

9.7.1 Subtheme 1: Approaches to mentor/mentee selection

There was no formal pairing of the mentor with the mentee in these hospitals *“you just find yourself working with someone but being attached to someone, that hasn’t happened”* (P-02). The dyad relationship started as a result of the day-to-day activities of the nurses and midwives on the ward. Once a staff was allocated to the ward or assigned a particular task within the organisation, it was an opportunity to start a mentoring relationship: *“the ones you find on the ward are your responsibility”* (P-25). This allowed the relationship to develop organically based on a good personality mix, comparable passions and admirable or impressive work ethic as participants reflect on the start of their mentoring relationships:

“Maybe they saw something in me, if they speak to the whole group, may be in the corridors they will say something to me after” (P-07).

“I don’t know what attracted me (laughs). Am so joyful I think that was what attracted them to me” (P-15).

On some occasions, mentoring relationships arose from the direct initiative of the mentor or mentee *“most cases the mentees identify their own mentors. So, it would be a sort of privilege when someone identifies you to mentor them depending on how well they feel they can relate with you or at least connect with you”* (P4).

9.7.2 Subtheme 2: Current mentoring strategies

Four approaches to mentoring existed in the hospitals: individual one-on-one mentoring, group mentoring, inter-unit mentoring, and inter-facility mentoring. Individual mentoring, although was the most commonly occurring, it was non-mandated: *“Even in the employment*

process it's not enforced. Ok you can support but then it's not that its mandatory, it's not mandatory that I must, whoever you find, ... it is not part of whatever is enforced that you must do it: like as you come duty like you must manage, you must treat patients; so it's not mandatory that you must teach, you must mentor, no" (P-33). This approach to mentoring was largely left to chance and circumstance. It was characterised by brief informal episodes in which participants said they were unaware of what they were doing but were sure activities were consistent with mentoring: *"But sometimes we do it when we don't think we are mentoring someone. Like I have done it several times, but I would not attach mentorship to it. But you don't even think that you are actually mentoring someone, you just think its good work. There those who look at you and really want to be like you"* (P-01). These mentoring episodes were brief lasting only as long as the nursing/midwifery task at hand or until the goal was achieved or until the placement ended particularly for the students and interns.

These facilities received students and interns from the nursing and midwifery schools in the region. Due to the overwhelming numbers, the second approach to mentoring, group mentoring, was used. It was expected that the mentor would attend to the students in a group, making use of the group dynamics in mentoring: *"you do as a group the ENT group have come here for practical part, first of all you orient them, you ask them their objectives and also you give them time like a week, you see where the weak area is and then you plan for a CME and teach these further"* (P-27).

The last two approaches to mentoring were unique to these facilities. Inter-unit mentoring occurred in the facilities, although rarely. These were mentoring activities organised between departments within the same facility. These departments had specific similarities, particularly in the demographics of patients they managed, for example, between paediatric outpatients and paediatric inpatient wards, paediatric ward and NICU (neonatal intensive care unit) as Participant 19 explains:

"We do inter-unit visits, these exchange-visits like I am in under five, we can go to paediatric ward or medical ward we learn from them, and they learn from us we share experiences regarding different activities. And they are also able to tell us several things which we don't know" (P-19).

Inter-facility mentoring was the formal approach to mentoring used in these facilities. The hospitals being regional referrals meant they were higher in the country's hospital structure, with infrastructure and human resources better than the lower facilities. Inter-facility mentoring was semi-structured in nature; mentors were appointed by the hospital

administration, and activities were funded by MOH and NGOs in the region. Mentoring activities included needs assessment which was followed by training from senior staff from the regional hospitals to the lower facilities: *“that one is about going to the facility, and seeing what people are doing, guide them on the right things to do. (...inaudible). The organisation appoints you and outsource you”* (P-09).

9.7.3 Subtheme 3: Desirable qualities of the mentor and mentee.

Participants perceived desirable attributes in the key stakeholders in mentoring. They described their ideal mentee as one who was willing to learn and willing to engage in mentoring; as Participant 13 said: *“ And you also need to have the zeal of wanting to expand your knowledge not to only base on what your mentor tells you, form whatever he tells you, you expand on it and also if you seat with these mentors they are able to tell you what they want to achieve, as a mentee you also have the responsibility to help them achieve that”* (P-13). Other attributes, in the order of how frequently they were referenced, were: having clear personal career goals, being adaptable and flexible, having the ability to communicate appropriately, and changing behaviour when it is necessary. Other attributes included managing their time, being knowledgeable, hardworking, humble, patient, and active, and having a good attitude toward the profession, as shown in Figure 9.2.

Participant also described their ideal mentor. The most desirable attribute was having discipline-specific knowledge and skill: *“both practical and clinical skills for our setting, should have updated knowledge all the time, should continuously be reading. So as when faced with a challenge they can easily navigate it”* (P11). The second most desirable attribute was having relational skills, such as good communication and interpersonal skills. Other attributes, as shown in Figure 9.3 in order of frequency of reference by the participants, were:

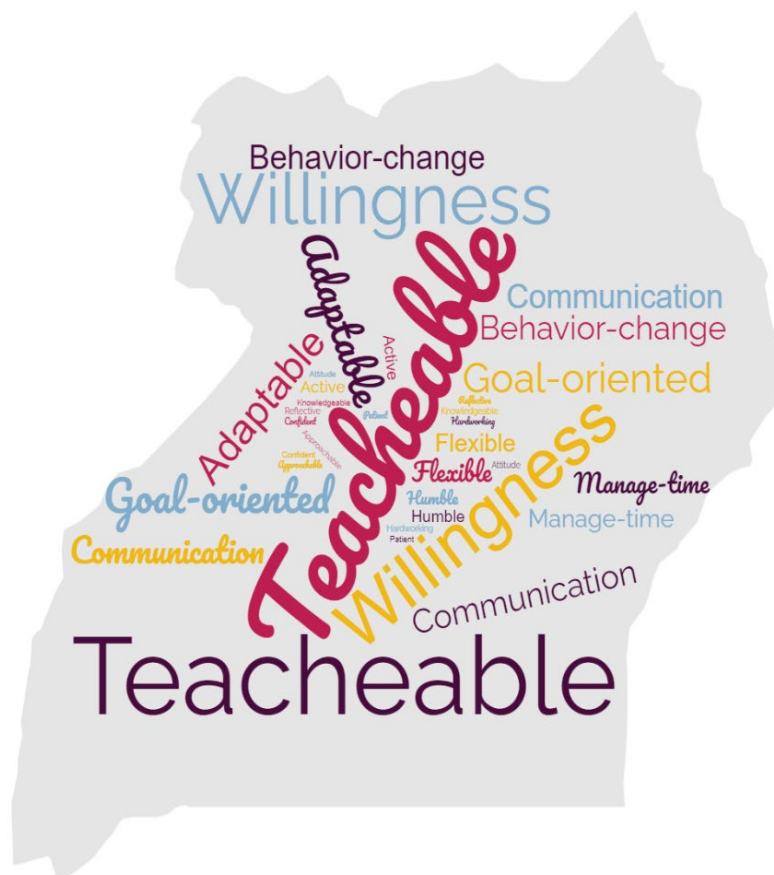


Figure 9.2 Showing the desirable attributes in mentee.

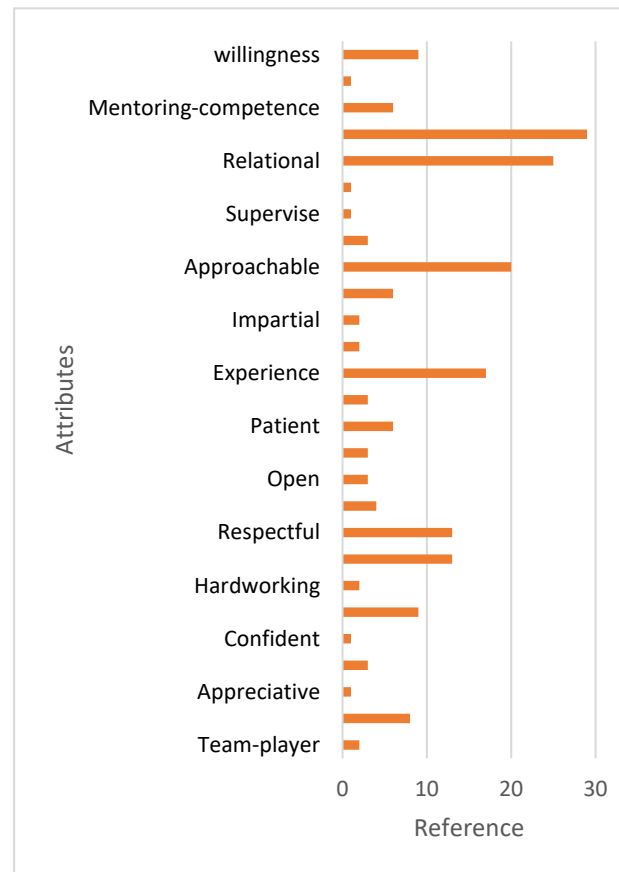


Figure 9.3 Showing the desirable attributes in mentor.

being approachable, being respectful and kind and have enough years of experience working in the clinical area.

9.8 Theme 5: mentoring processes

Participants experienced mentoring as a process characterised by sets of activities performed by the mentee, mentor, and the organisation. Within these mentoring activities, there were responsibilities for each of the stakeholders.

9.8.1 Subtheme 1: Responsibility of the mentee

The mentees main responsibility was to learn and demonstrate that learning had occurred:

“what I do I make sure that I don’t disappoint her. You know, am a mentee but at the same time I am a mentor somewhere, I know what makes a mentor unhappy so I don’t want to annoy her, to feel disappointed to lose trust in me, I make sure I do what my mentee should do for me. So, I listen very well to whatever she has told me and I make sure I put in practice so that I motivate her to continue mentoring me” (P-30). Participants acknowledged that although a lot of advice is given and knowledge is shared, the onus is on the mentee to determine the relevance of this information to their own personal and career goals as Participant 20 said: *“ok me my role of course I would take the advice they have given me but also my role is to determine whether their advice is ok with my needs. My mentor can tell me something, but I feel it’s not right I can also tell them why we don’t do it this way, isn’t it better?”* (P-20). This demonstrated mentee responsibility to take an active role in the mentoring relationship.

The participants emphasised showing respect to the mentor as the mentee's responsibility. Respect was crucial in establishing trusting relationships. Respect was demonstrated in culturally prescribed ways: *“I have to respect my mentor. You have to show it [respect] by greeting him, you mentor cannot arrive then you... you have to show some respect. Of course, they used to teach us at school when your mentor comes in, when your senior comes in you have to stand up to show that you are respecting them. You show him some respect”* (P-31).

Mentee is also expected to show initiative. Take the initiative to consult when the need arises. This initiative can be extended beyond self to desirable change in clinical practice: *“While the mentee who is usually looking up to the mentor, usually their role is to also consult the mentor in times when they are faced with challenges that are beyond their skills or beyond what they would expect to come out”* (P-03).

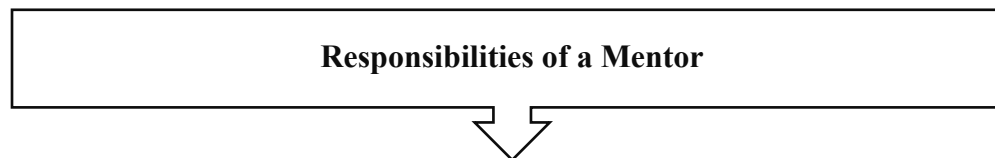
Lastly the mentee was encouraged to perpetuate the mentoring process by setting an example and mentoring other junior colleagues: *“Then by the fact am their mentee they will also take on courage to mentor others; they will say I mentored this person and is doing well so I act as an example they can refer to always”* (P-20).

9.8.2 Subtheme 2: Responsibilities of the mentor

Responsibilities of the mentor were present in the data described in nine separate categories as shown in Table 9.2. Developing the mentee’s clinical competencies was the main responsibility. Mentor did this through mentoring activities such as coaching and demonstrating daily clinical skills and procedures on the ward. Mentees were coached on *“daily things we do like the process of admission of patients, discharging patients, referring patients, taking the vitals in general monitoring the patients, recording the drugs in the dispensing book, giving treatment those kind of things”* (P-18). Guiding, teaching, and delegating were some of the other mentoring activities done to enhance the mentees competencies in the clinical area.

It was important the novice nurse-midwives or the newly recruited nurses and midwives fit well into the profession and the organisation. The mentors did this by orienting the mentee into workplace systems as Participant 10 describes: *“Wherever people work there are principles to be followed and it is always these mentors who are always reminding us to follow these principles, you have to do this you have to do”* (P-10). The mentors also had the responsibility of supervising the mentees to ensure they practicing as per professional standards and organisation guidelines. The next important category was in regards to the mentor’s role in creating a conducive practice environment for the mentee to practice: *“aaah first of all, we have to have team spirit, work as a team, you don’t isolate him, you bring him near you, you don’t shout at him, if he is going astray you chip and say my son or my student let us do it like this. And having the equipment and instruments at hand, you don’t hide anything from them, place the things there because they have been in training, they have the knowledge”* (P-19). Furthermore, being in the clinical area triggered many emotions for many nurses, and the mentor helped them cope well, given that they had been through similar experiences.

Table 9.2 Showing responsibilities of a mentor.



Develop clinical competencies of the mentee	Ensuring the mentee is a good fit into organisation and profession	Keep an eye on	Role model	The gateway into the profession	psychosocial support	responsible career progression of mentee
<ul style="list-style-type: none"> • Coaching • Delegating • Guiding • Training and teaching 	<ul style="list-style-type: none"> • Supervising • Counselling • Orienting • create a good working and learning environment for the mentee 	Identify: <ul style="list-style-type: none"> • Learning opportunities • Mentoring need 	<ul style="list-style-type: none"> • Model good practice • Inspiring 	<ul style="list-style-type: none"> • Pave the way for the mentee. 	<ul style="list-style-type: none"> • Deal with difficult situations • Mentor's golden nuggets' • Personal, emotional and social support 	<ul style="list-style-type: none"> • Appraise • Recommend • Career opportunities

It was the mentor's responsibility to identify mentoring needs of the mentee, see the potential in the mentee as Participant one clearly described: *"but as you interact, that's when you can say, I think this person needs to be mentored along this line. Yah, it helps you identify the people that need help and the potential of someone, so that you know, this person, if I mentor her along this line, she can do better"* (P-01). Mentors also identified learning opportunities such as nursing and midwifery courses, CPD opportunities, and conferences relevant to the mentee's knowledge. These two functions formed an essential responsibility of the mentor to keep an eye on mentoring needs and opportunities.

Role modelling was another clear responsibility of the mentor present in the data. Mentors modelled good practice and made the profession admirable and their competencies exemplary, as Participant two elaborates: *"mentoring is like having someone you look up to, you have someone who, the person has to be more experienced than you, because of the time they have taken in the field, and their actions, or the way they do the job, which definitely you also want to do, you actually want to do the way they are doing"* (P-02).

Mentors were the gateway necessary for the mentees to go through to be able to ultimately join the profession. Categories of mentees included students and interns who could only join the profession after being signed off by the mentors *"because if I don't mentor him, he will not qualify, he won't get his paper[certificate], he is for internship he needs to be mentored"* (P19). Mentors paved way for the mentees particularly where they were unable to fulfil the activity required of them by their mentees as participant three gives an example:

"Another thing also could be aaah attaching this mentee to different groups that can be of help or to different people. I could be your mentor, but I don't have the specific skills you would want, for example IT these days, ... I might not have those skills but there is someone else that has them. Since me I know that person, I become a connection between the mentee and that person" (P-03).

For other mentees who were not new to practice, mentors were responsible for their career progression. Mentors identified career opportunities for the mentee as they looked out for and shared job adverts and promotion opportunities for the mentee. The hospital implemented a human resource appraisal system that provided mentoring opportunities. Appraisals were essential for future promotions in the organisation. Where new career opportunities were present, mentors provided a recommendation to the mentee's application process, as Participant 12 explained *"I was trying to apply for a job and he was easy and receptive, I wanted him to recommend me. Even when you need help, he is there"* (P12).

Another critical responsibility of the mentors was providing psychosocial support for the mentees in the clinical area. Support was especially needed when dealing with difficult situations, such as breaking bad news to a patient or dealing with a challenging patient. In such situations, the mentor offered words of encouragement. These mentors' nuggets were beneficial coming from somebody a mentee admired, as participant seven describes:

“so, the positive feedback they give that you are capable, you are confident, we believe you can do this hmm, even when you feel that here you cannot, you struggle and be what your mentor sees in you. I feel the feedback they give; it moulds you into some kind of person” (P-07).

9.8.3 Subtheme 3: Responsibilities of the organisations

It is important to note that no formal mentoring occurred in these organisations. Nurses and midwives perceived organisation's role of the in supporting mentoring as two-fold. Firstly, organisations needed to focus on the overall clinical environment to make it conducive for mentoring. Secondly, organisations needed to focus their efforts on formalising mentoring in the workplace. The perceived responsibility of the organisations in mentoring is demonstrated in the two broad categories below:

Build a conducive practice environment.

Participants believed that the clinical environment in which mentoring occurred needed to align with the mentoring vision through three main ways, as shown in Figure 9.4. Firstly, by creating a mentoring culture in which the organisation supported mentoring. Mentoring culture could be built by providing protected mentoring time, providing mentoring guidelines and tools, and a policy designed explicitly for mentoring, as Participant four explains:

“I would think besides training they should provide a conducive environment, there should be time also put aside for the mentoring for now there is only 8-5 filled up with lectures and demonstrations so there is no specific time put aside for mentoring you have to create the time and for most people that comes as burden that I have to squeeze either at the end of shift or weekends and for some people weekends is a no go area” (P-04).

Participants also believed that improving the practice environment could create a mentoring atmosphere. The organisation ought to provide the infrastructure that depicts quality and safe care. Maintaining a supply of sundries and equipment was important for mentors to demonstrate excellent and ideal clinical practice: *“I would request them to put whatever the equipment needed in every unit to be in position so that the performance is better so that the*

students can learn that these procedures use this equipment. Because most of the times we just gamble and improvise for the work to go on. If the equip were available as needed it would enable these students to learn better” (P-17).

Mentoring was demanding on the human resource; therefore, affecting the mentoring environment by recruiting more nurse and midwifery staff was essential in demonstrating support for mentoring. Although recruitment was important, more crucial was a representation of all nursing and midwifery cadres as well as the representation of nursing and midwifery in positions of organisation executives, as participants 30 and 9 describe:

“As a hospital they have people who have different titles and with different qualifications... they help us understand, like now, since I have a diploma, I can qualify to go here, go here or here. I can decide and choose, they also can tell you when you go here, you can be employed as this...” (P-30).

“...because if you go to the ministry of health its full of doctors, even on the positions where a nurse can handle even here in the hospital the director is a doctor should it be like that? That is what has made nursing to be under looked. Now the nurses have always felt inferior. All the positions are always given to doctors, they feel doctors are on top of them” (P-09).

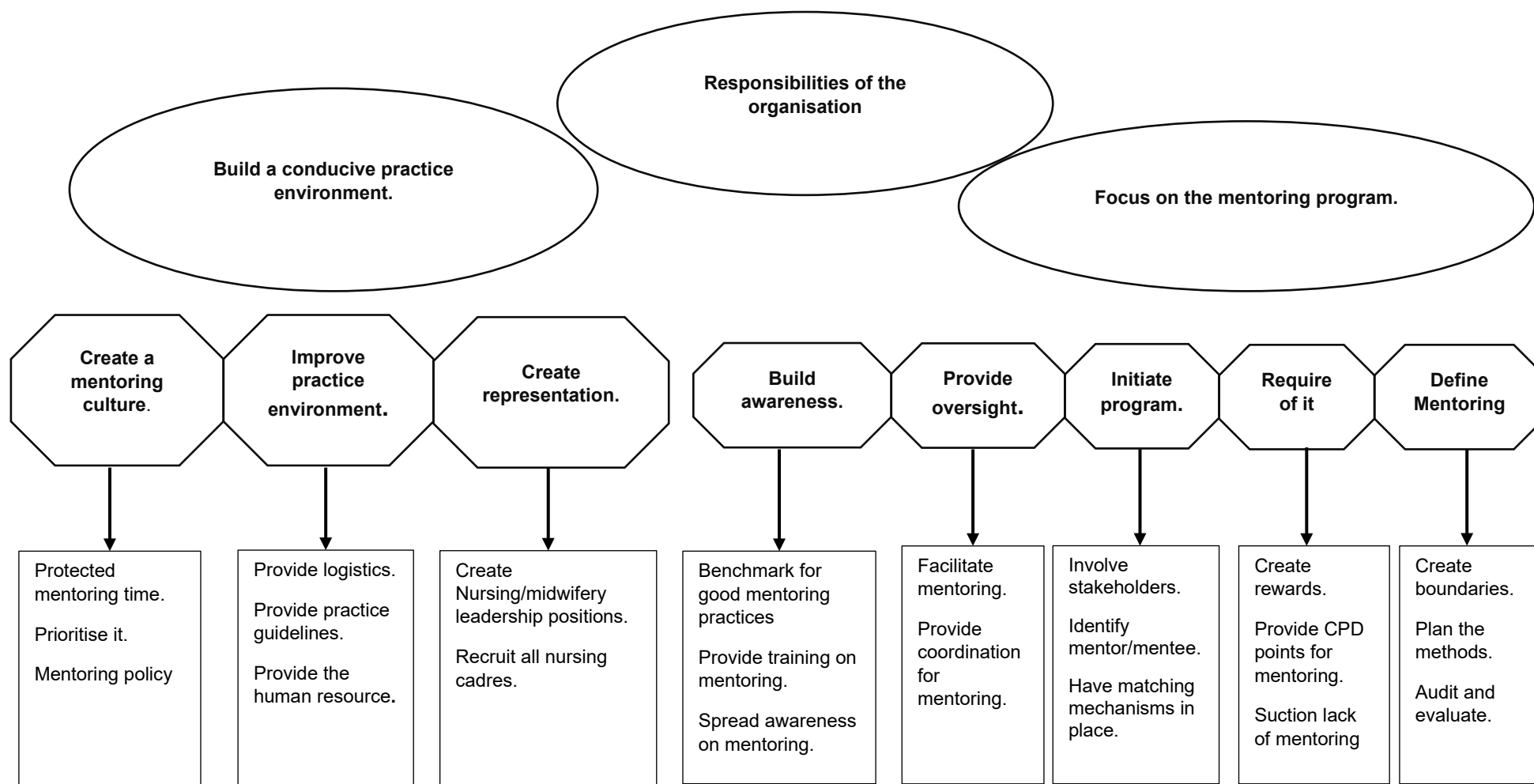


Figure 9.4 Structure of organisation responsibilities towards mentoring.

Focus on the mentoring program.

The participants emphasised the role of the organisations in building a mentoring program. Five perceived responsibilities were highlighted, as shown in Figure 9.4. The main responsibility of the organisation was to build awareness around mentoring. Participants believed this could be done through training on the roles and benefits of mentoring and demonstrating good mentoring to the rest of the stakeholders. Awareness could also be created through benchmarking for good mentoring practices, as one of the participants explains:

“Well, I believe for someone to support something they need to understand what it is. The management themselves have to know what mentoring is, if they don’t know what mentoring is, they would think that it is something you should talk about but not do because everyone will be saying mentoring is very good but when you tell them what it entails, they say can we talk about that another day” (P24).

Providing oversight over mentoring activities within the hospital was another perceived responsibility of the organisation. Facilitating mentoring activities such as compensations and rewards as well as providing coordination: *“They need to support that, of course in the aspect of promotions, because if someone does it[mentoring], he knows that if you do it better they make national mentors in certain procedures and whatever. But can we have national mentors or regional mentors like in these particular regions we are having training schools but can promote it see that at least these members are brought on board” (P-33).*

Participants expressed a desire for the organisations to initiate mentoring programs through establishing formally structured programs. Active involvement of the stakeholders in all aspects of the mentoring program was essential. Participants suggested that nurses and midwives be offered the opportunity to identify their own mentors and mentees or, at the very least, matched using appropriate mechanisms as explained by Participant six: *“then matching. Also, the matching matters, if you just match two people without considering certain factors then it may be hard for the relationship to grow” (P-06).*

Mandating mentoring activities was another feature salient in the data. Participants suggested creating an atmosphere where good mentoring was rewarded and bad mentoring was sanctioned. Participant-prescribed rewards ranged from tangible financial rewards such as mentoring allowances and welfare incentives to non-tangible rewards of appreciation and acknowledgment. The issue of fairness in the reward system was also emphasised, and

participants warned of the outcomes of an imbalance in the issuance of rewards as a participant explicitly states:

“I don’t know which type of motivation but there needs to be motivation for nurses not in terms of money or things but there should be some type of motivation, where the nurse is proud of what she is doing. It has to be general for every nurse so that we have the same focus otherwise if it’s just a few that are motivated some will feel left out. You find a fraction are motivated, the motivated feel overworked, they are the ones doing everything, the others don’t want to do certain things saying that’s not my job” (P-12).

The final category for the subtheme on the organisation's responsibilities was about having clearly defined mentoring. Participants advocated for clearly defined boundaries in mentoring marked by contracts with clear goals and objectives, stakeholder roles, and planned mentoring methods. Furthermore, participants emphasised the role of organisations in evaluating and auditing mentoring programs through mechanisms such as support supervision: *“Nurses’ council has a supervisory role and regulatory role, as part of their mandate if they can also audit ability to mentor so that it becomes part of their supervisory role, their regulatory role. Because we know that good nurses are going to come from good mentoring system. And nurses’ council they are trying to ensure there are good nurses and midwives, but if the structures to support good nurses are weak you automatically building on a weak foundation” (P-24).*

9.9 Theme 6: Positive experiences realised from mentoring.

Mentoring was experienced as beneficial to the three stakeholders: the mentor, the mentee, and the organisation.

9.9.1 Subtheme 1: Benefits of mentoring to the mentor

Participants experienced the benefits of mentoring others in clinical settings. One of the most popular benefits was self-improvement (n=14). Participants felt that mentoring kept everyone in check, striving to be the best version of themselves so that they could set an excellent example to others in the profession and in the hospital, as participant three explained:

“You know first of all being a mentor is a responsibility, its being a role model. Imagine you have just been there, not caring, just you and whatever you have to do. You drink freely you move around freely, but when an 18year old or 20, 4 or 5 of them just tell you, you are my role model, you start thinking to yourself, I need to be a better one, you improve yourself. Self-improvement as mentor” (P-13).

The mentors gained knowledge by directly learning from the mentees but also indirectly when they had to read the latest evidence and consult widely on behalf of the mentees: *“By the way they also know more at times more than us, it’s now two-way, they learn from us and we also learn from them the current, you know medicine changes”* (P-19).

Participants spoke of the thrill of mentoring junior nurses in the hospital. Mentoring brought joy, happiness, and satisfaction. In fact, participants considered mentoring others a privilege:

“When you one day you look at people and say that passed through my hands, that gives you some mode of satisfaction” (P-03).

“So, it would be a sort of privilege when someone identifies you to mentor them depending on how well they feel they can relate with you or at least connect with you” (P-04).

The third benefit of mentoring was about building a professional network of nurses and midwives present in all the geographical regions of the country and even abroad. Mentoring increased their visibility within the organisation and the profession; it advertised their work and skills. Mentoring snowballed opportunities for the mentor, making them visible as well as their works. Mentors inferred that the good deeds they did in mentoring often spoke for themselves. This meant the reverse was also true in which a mentor could easily be known for bad mentoring. In other words, mentoring presented an opportunity to write on a canvas how one wanted to be known within the organisation and the profession:

“People think positively about you, sometimes you find opportunity which you didn’t say didn’t say I am going to apply for it. You just get opportunity because people have found you are good to them. So, if they get an opportunity for something they want you to be engaged in it; they bring you closer they feel they can work with you because you are very supportive to them” (P-33).

Participants also felt that mentoring reduced their workload in clinical settings. The nurses and midwives that were mentored could do the mentor’s work in the event s/he was absent due to other engagements but also could enable early or timely retirement: *“People think positively about you, sometimes you find opportunity which you didn’t say didn’t say I am going to apply for it. You just get opportunity because people have found you are good to them. So if they get an opportunity for something they want you to be engaged in it; they bring you closer they feel they can work with you because you very supportive to them”* (P-18).

As the participants mentored varying cohorts of mentees, they felt that their confidence to mentor others increased with time; as participant four said: *“they say practice makes perfect. the first few times of course you struggle, I didn’t know what to do what to say because I told you it was informal kind of mentoring but over time it has become a part of me. now it comes naturally, it’s much easier to mentor now”* (P-04).

In sharing the mentoring experiences, participants brought to awareness the role of good karma. They emphasised that doing good to others always returned to them in a different form. To these participants, mentoring had a spiritual benefit: *“of course you get blessing for me that how I look at it, although blessing is not tangible, but you realise you have blessings”* (P-33).

For a few of the nurses and midwives (n=3), mentoring was a stepping stone in their career journey. Mentoring was a tool they could use to get promotions in the organisation. While to other participants, mentoring affirmed their relevance to the organisation, as Participant 18 states: *“- they keep you in the system, you don’t get out, even when people want to go out, but you find those others who are bringing you back on board because if find you have certain unique things that you do”* (P-18).

Some participants, although few, had access to the mentoring rewards. Rewards in the form of acknowledgments like a thank-you note. While others in some departments of the hospital received rewards that were welfare in nature: *“there is not much, but ok, some training schools, they bring a small motivation and we share as staff- they bring money, they bring sugar and coffee”* (P-27).

9.9.2 Subtheme 2: Benefits of mentoring to the mentee

Participants agreed that mentoring was very beneficial to the mentee. Overall, mentoring led to a well-balanced nurse/midwife who was able to function fully in the clinical area while tapping into their abilities and finding a balance in coping with the complexities of the healthcare system. Mentoring developed their clinical competencies and leadership abilities and shaped their perceptions of self within the profession. In summary, mentors were the shoulder that the mentees could always lean on, as stated by Participant 9: *“that someone you run to in case in case of any issue even professionally or even personal”* (P-09). The participants identified eleven outcomes of mentoring for the mentee as shown in Table 10.1: 1) developing confidence, 2) developing clinical expertise, 3) socialise and coping in the workplace, 4) career choices and growth, 5) personal growth, 6) professional support, 7)

function as a full member of the profession, 8) be a well-balanced social person, 9) develop leadership and management abilities, 10) offer a sense of belonging, and 11) shape perceptions of the profession.

Table 9.3 showing the benefits of mentoring for the mentee.

Mentee benefit	Participant experience
1) Developing confidence	<i>"You can be there you have your theory but when they bring for you the patient here ok you know this one has fainted, the first thing check the vitals, if BP is low you start rehydration but you are not confident with the cannulation, or may be you have the knowledge but wondering "I am I really doing the right thing?" but if you have been with this mentor who is reassuring you from the hospital, confidence will be there, even when they are there you will be able to manage that" (P13)</i>
2) Developing clinical expertise	<i>"you know I am a midwife I work with mothers, it has helped me provide optimal care; the level at which I can provide care to a mother and her baby right now is different from the way I was before being mentored"(P-20).</i>
3) Socialise and coping in the workplace	<i>"I remember there was an ICU patient they had brought, I did not expect the patient to die, I thought we would reach where we were going because we were taking the patient to Mulago but reaching on the way the patient died before we reached even far, around KAFU there. I broke down, good enough was with my mentor" (P-15)</i>
4) Career choices and growth	<i>"it's a positive effect actually, with my mentorship, you know I started as a nursing aide then from there I went for enrolment. When I was more exposed to this work with those experiences, nursing now remained conc in my mind when I went for interviews, I was taken for diploma" (P-17).</i>
5) Personal growth	<i>'To make best of that person because you have already seen that if that person if brought up in a certain way can do something much better especially for the profession and for the community where that person is working" (P-01).</i>
6) Professional support	<i>'It's a very tasking profession its very energy draining profession, I have seen people break down, people get so weighed down from work and stress. One thing about mentorship is that, you don't feel the heat of work or the stress of work that much because you have someone you can always talk to" (P-06).</i>
7) Function as full member of the profession	<i>"then automatically I expect you to perform better at the job" (P24)</i>
8) Be a well-balanced social person,	<i>"it has also made me to....someone has personally told me I need to open up. When I came, I don't share a lot, I usually keep quiet. I have this, I took him as a mentor he has always told me that sometimes I need to speak up" (P-02)</i>
9) Develop leadership and management abilities	<i>"Helping you build your leadership skills, human resource management, proper accountability like that, correcting you rebuking you" (P-07).</i>
10) Offer a sense of belonging	<i>"then she called me takes me around the ward, she told me this is how we do things, warned me about some people who might be rude, and told me how to respond to them. That alone made me feel at home" (P-03)</i>
11) Shape perceptions of the profession	<i>"yea she has influenced me to look at midwifery as something so good. Because it is something I did because my parents told me to go for midwifery. So, I came because the parent said so. But as the process went on I now loved to be a midwife now I advocate for people to become midwives. So, I think her role she has done, she has made me to love the profession" (P-08).</i>

9.9.3 Subtheme 3: Benefits of mentoring for the organisation

Mentoring practices resulted in a clinical environment that was comfortable and dependable for the nurses and midwives. Mentoring dyads were a group of friends in the workplace that had each other's back. They had a shared vision of patient care which shaped the workplace environment. This made strong cohesive and personal bonds with implications for improved service delivery, improved individual commitment to the organisation, continuity of work, and increased job satisfaction as participants 9 and 24 explain the impact of mentoring on their work environment:

“And you are also going to have a good working environment. Imagine people you mentored, and you are working with them and they are at the same level with you or some are better than you because sometimes you mentor people they become better than you in certain aspects... you feel a certain joy within you and you are like yes I can die for this team and the team also has this feeling that they can die for Tracy because they look up to you and they are almost as good as you. So, the work environment is really nice and people look forward to go work” (P-24).

“...but if you go maternity, those people will tell you we used to enjoy working with this man because I was free with them. Someone tells you cover for me a shift i have a sick child, you understand and help them cover the shift. And you find you are free with everyone and have few people complaining about you” (P-09).

9.10 Theme 7: The negative aspects of mentoring

This subtheme elucidates the participants' encounters with *negative mentoring experiences*, the impact these experiences had on them as individuals and the relationship— *Negative experiences don't leave you the same* and how they coped by *navigating the negative mentoring experiences* as shown in Figure 10.1.

9.10.1 Subtheme 1: Negative mentoring experiences

Participants were asked to discuss any negative experiences encountered in mentoring. Mentoring was experienced mostly positively, with some participants (n=5) explicitly saying they had not encountered negative experiences in their mentoring relationships. However, there were instances where mentoring was described as a bad experience that manifested in many forms.

There were instances of hostility experienced by the mentee from the mentor. This was expressed in the form of comments that downgraded the mentee's achievements.

Occasionally, these snide and belittling comments were delivered in the presence of patients

and other junior colleagues. Mentors were often described as being rude, quarrelsome, and always looking for faults within the mentee, as Participant 12 explains:

“For me I can put a cannular and you have a bachelor’s degree and me a certificate and cannot put a cannular. For you what we’re studying?” (P-12).

here were stereotypes expressed by the participants that had implications for mentoring experiences. Often mentoring experiences were viewed through the lenses of age, generation, gender, and ethnicity, resulting in stereotypes such as ageism, sexism, genderism, and tribalism. These stereotypes affected how the mentors and mentees perceived each other in a mentoring relationship. In fact, participant ones stated on one occasion that she felt the mentees judged her physical appearance:

“May be sometimes they look at the height, the weight and they say aaa now this one what can she do?” (P-01).

“Another thing that affects mentoring one of it I had talked about is ...tribalism you find the other feels much more comfortable mentoring his or her tribemate and can give him or her everything and when she or he is mentoring you and you are different tribe, and there are some tribes that are against each completely and when they realise you are from that specific tribe cannot feel open to give you all the required information” (P-30).

Feelings of resentment towards the mentee were often perceived and, on one occasion, expressed by one of the mentors. Mentors were perceived as being jealous that mentees were having an easy raise through the ranks. There was a perceived expectation that the junior nurses and midwives would experience similar career hurdles as those experienced by their predecessors. Mentors were perceived as holding back knowledge with the worry that the mentee would soon be better than them: *“and you are working with, and they are at the same level with you or some are better than you because sometimes you mentor people they become better than you in certain aspects, which can make someone be negative” (P-24).*

The lack of complete awareness about the mentoring concept led to misinterpretation of mentoring efforts. Mentors could easily be labelled bossy, which translated into mentoring becoming burdensome for both parties in the relationship: *“Yes, sometimes someone will feel like they are being despised, they feel you are showing off, you are showing them that you have a lot of knowledge” (P-11).*

Mentors also felt that the reward for their mentoring efforts was being given or taken by those who did not directly participate in the mentoring. The act of credit-taking was surprisingly

blamed on the executive management for not remitting the rewards to the mentors as the training institutions and partner NGOs delivered them. Other senior nurses and midwives also reaped other participants' mentoring efforts:

“But I think its normally given[rewards] like those schools when they bring in students they take to administration but they [administration] don't give us, they remain with everything. That's what I think, actually that is it. They give them some money to allow students practice from the hospital from any school, am sure they give them some money but the in-charges you don't get anything. It remains in the administration, the big man keeps everything so the person who has not done anything is the one who enjoys everything, its not fair at all” (P-25).

Mentors had a few mentees who were their favourites and were not afraid to show it, making the rest of the team feel left out. Bias was also present in the distribution of mentoring resources, where management spent mentoring resources only on a specific set of mentors; this created unfair access to mentoring resources.

Exploitation was also a recurrent category in the data. Mentors used their power in the mentoring relationship to use the mentees for their gain. Mentees described participating in activities that were not for the common goal of the mentoring relationship. They talked about sacrificing their time and comfort to please their mentors. Mentors were often cunning and, given the power imbalance in the relationship, made it difficult to turn down their requests: *“she calls you my son, today I know you are off but my son you come and help me and do this. When someone calls you son, you find you are going to bow down to any work they ask you to do” (P-14).*

Participants also described their mentors as not being competent enough to mentor. Some mentors did not have the qualifications that were above or very least matched those of the mentee. Some mentors, although they possessed the clinical competence required to mentor others but lacked mentoring skills.

The final categories of negative mentoring experiences centred around the mentor feeling undermined, unappreciated, and unneeded: *“the people who are unappreciative which is expected because all of us are unique we don't expect people to react the same way. And then sometimes, yes, the ungratefulness in some people” (P-03).* Interestingly the mentees also felt disrespected by the mentors on several occasions.

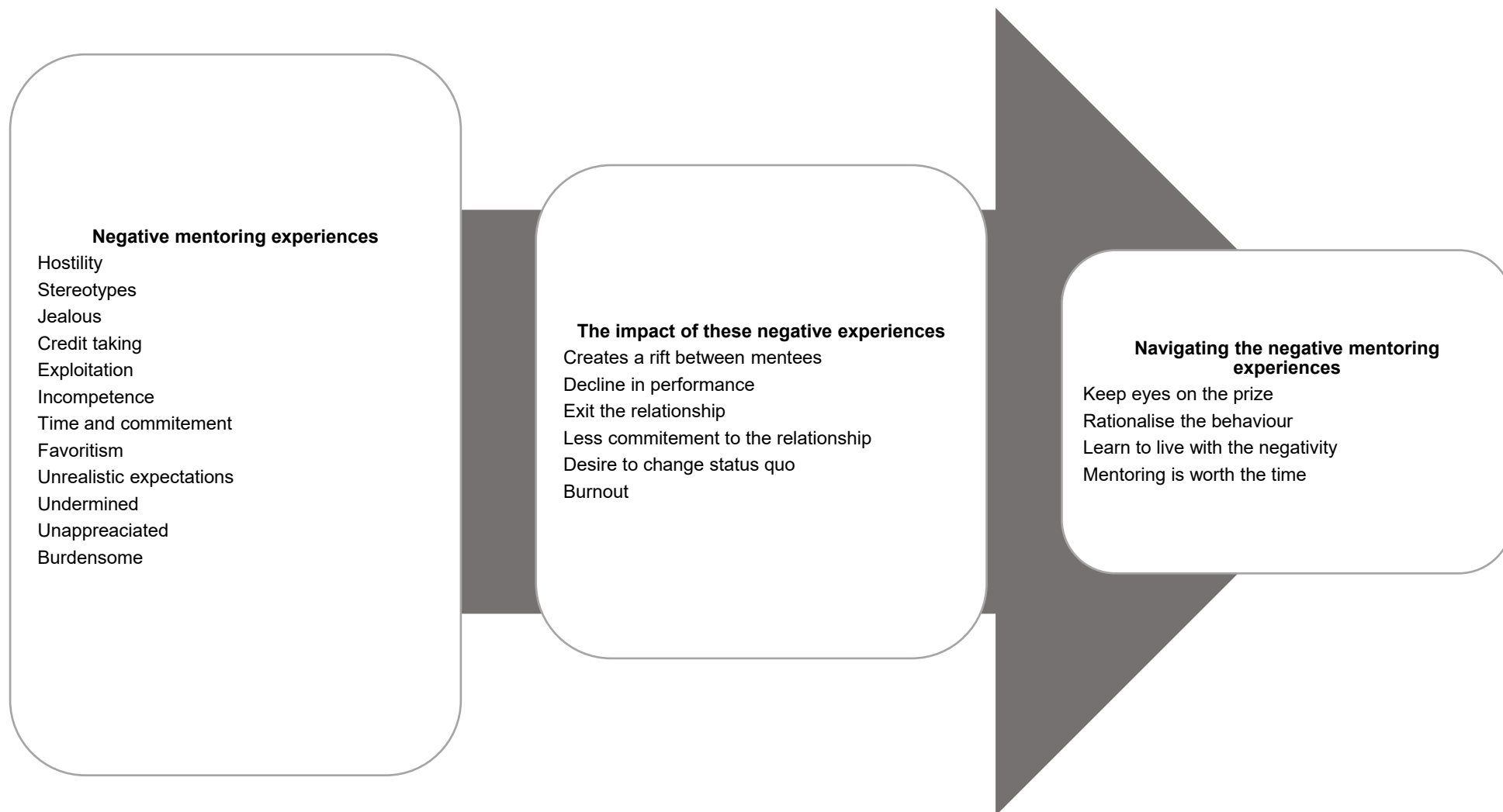


Figure 9.5 showing the breakdown of the theme *the negative aspects of mentoring*.

9.10.2 Subtheme 2: Negative experiences don't leave you the same.

Participants acknowledged that mentoring was never aimed at being bad; however, these negative experiences had an impact. The experience of bad mentoring had an impact on the mentee, mentor, and overall quality of the relationship. Negative experiences such as favouritism created a rift between the mentees in their struggle to get attention and acknowledgment from the same mentor. Negative experiences left the participants feeling overwhelmed and mentally exhausted. This made them less committed to the mentoring relationship, while others opted to exit the mentoring relationship and vowing not to seek out mentoring in the future:

“At the end of the day, you are overwhelmed” (P-14).

“When I experienced them, I didn't really leave the mentorship but I begun attaching less value and less commitment to it” (P-07).

9.10.3 Subtheme 3: Navigating the negative mentoring experiences.

Participants devised means to survive the negativity within the mentoring relationship. These coping strategies were the string they held on to survive the bad experiences. Participants kept their eyes glued to the prize. They were aware that mentoring could be damaging, but that was never the goal of mentoring. As long as their personal and career goals were achieved, negative experiences could be overlooked, and participants simply learned to survive with negative mentoring in clinical settings. For some participants, negative mentoring created within them a hanger to do better: *“I actually want to do something and change it” (P-21)*. Otherwise, in some cases, the participants rationalised the destructive behaviours experienced during mentoring as a Participant 7 said *“I don't know, maybe they do it subconsciously” (P-07)*.

As participant eight explains, following an encounter with a negative experience, he would reflect on the encounter and try his way to navigate these experiences *“Even where it seems like this is not correct, I sit down and think about it and after a week I may be they were right” (P-08)*.

9.11 Theme 8: Obstacles to mentoring

This theme centred on hurdles within the stakeholders that affected the mentoring process. Obstacles to mentoring were in two categories: obstacles arising from the organisation and individual barriers to mentoring.

9.11.1 Subtheme 1: Obstacles arising from the organisation.

These barriers were related to the clinical environment and the organisation. There were four main classifications within this subtheme. Firstly, the participants indicated a lack of infrastructure to support mentoring in the hospitals. The nurses and midwives expressed concern that the hospitals in their current state did not provide an ideal environment to translate knowledge and teach nursing and midwifery skills. The lack of infrastructure ranged from a lack of equipment for diagnosis and treatment to basic supplies like gloves and other personal protective supplies. Mentors felt they passed on knowledge to junior staff based on theory and improvisation, contrary to ideal quality care. This was well explained by Participant 8:

“Then in terms of supplies, they are not there, you know if you teach somebody, we use a cord scissor to cut the cord, then in actual sense there is no cord scissor instead you have to look for a razor blade, it becomes hard for this person to appreciate” (P-08).

The deficiency in infrastructure was also related to a lack of safe mentoring spaces where skills would be taught at a pace reasonable for the novice practitioner. Participants had concerns regarding teaching using patients in high-fidelity settings. There were no demonstration rooms where learning could occur in a simulated setting before being exposed to the actual patient. The clinical environment can be fast paced but also unsafe even for the novice; for example, in the event learning occurs with a highly infectious patient. Safe mentoring spaces would allow for mentoring, especially on high-fidelity wards, as Participant 33 explains how learning can be chaotic on some wards:

“So some procedures are bit tricky to assist people you wait until it’s there or when it’s there this person[mentee] might not be available or if he is there you don’t know if he has understood but you who knows you are jumping up and down and picking what you want, and you leave the person[mentee] in suspense. You make an assumption that he has understood but that’s wrong. Because he doesn’t know when you started by the time you involve the person you are already in the middle of what you are doing, you start sending them bring this bring that they probably missed the important part, they don’t know why you are running around. By the time you finish either the patient survives or the patient dies, now you are in the second procedure of last office. He is like iii you mean this procedure...” (P-33).

Human resources also presented a challenge to mentoring, as Participant 22 described insufficient staffing: *“I would say lack of human resource, we are not enough, this is supposed to be fully fledged regional referral ... the nurses, the hospital is using the old*

staffing norm of general hospital, the nurses are not enough, there is a lot of work and so many project are brought in but the personnel is not there” (P-22).

Participants also talked about the overwhelming number of mentees on the ward. The hospitals partnered with nurse and midwifery training schools that often sent students to the wards for clinical placement. Since the schools were many per region, this further affected the mentoring experience as the student numbers were overwhelming for the mentors:

“now you go to the hospital, 10 students from one school and we have 10 schools within Lira. So, when they are on the ward they are just standing looking at each other and there is no one to teach them. Even the senior staff are already demotivated because they are overwhelmed” (P-01).

The nurses and midwives mentioned the lack of mentoring structures such as guidelines, standards, and rewards for mentoring. This resulted in mentoring being unstandardised and offered at the mercy of the few willing mentors. Mentoring was neither mandated nor required:

“You know now the system itself, the system right from ministry of health, the system has provided for mentorship. But it is us who are in these facilities that we do not see it, but if you look at the structures, me I think the system has provided” (P-01).

9.11.2 Subtheme 2: Individual barriers to mentoring.

Participants highlighted three main obstacles to mentoring in this theme. Firstly, some personalities presented difficulty in mentoring relationships. Mentors lacked the knowledge and experience to deal with mentees who were shy and appeared unengaged: *“in fact the challenges we get the young ones are not serious. When mentoring them they don’t care, they seem to be playful all the time, they don’t concentrate” (P-29).* Mentees also described some mentors as unapproachable, difficult and with their *“their mean face is on” (P-13).*

Poor attitude towards clinical practice, the profession, and mentoring, in general, had an impact on the overall experience and was the most common challenge experienced by many participants (n=20). This poor attitude of some nurses affected mentoring even for those willing to mentor, as Participant 14 explains:

“Also poor attitude of some staff because I remember when I had just come Ronald was willing to mentor us on surgical ward, before taking the patients to theater we would do preop and postop care very well, one time it was early in the morning around 8am he came we were working with some nurse, he asked whether we had prepared the patients prepop, he stopped us to bring back the patients and prepare them, then some other nurse came saying “ this is theoretical what you are doing you

are wasting time, they are waiting for the patients in theater, lets just push the patients". Ronal told him these are BSNs for us we don't call it wastage of time. We continued and did the preop, he [the other nurse] had to leave but was not happy. I think that can discourage the mentor, because he will be wondering how the other staff look at him, because you would want to keep the relationship with the co-workers as well" (P14).

Participants also highlighted the inherent lack of willingness to learn and unlearn bad practices. Nursing and midwifery practice had groups of people who believed they knew it all and were unwilling to learn new concepts and unlearn old practices. These practitioners were considered set in their ways, as Participant 4 explains:

"Yet sometimes it's something very simple that would make a whole big difference but because they have preconceived minds and they say this is how I learnt it in school you know science is not static and some of them are stuck in the past. I think that the biggest challenge in mentoring" (P-04).

There were other challenges attributed to the mentor role. These included a heavy workload inherent in the nurse and midwife's daily tasks in the workplace. This placed competing demands on their job, making it hard to dedicate time to mentoring others. Furthermore, participants described some mentors as lazy, unapproachable, and set in their ways, as Participant 9 described:

"when you come most especially nursing and midwifery profession, the old generation have their ways of how they used to do things and how they want people to... of which when you come to the new 21st century, things have changed, so of course you will actually think the old generation mentor is against your preferences kumbe [not knowing] it's because of the old training" (P-09).

9.12 Theme 9: Opportunities for mentoring in the workplace

There were opportunities within the workplace that provided an opening for initiating and nurturing mentoring relationships. The hospital runs a human resource appraisal system. During this process, each nurse or midwife made goals that were both career and practice related. Practitioners would discuss with their immediate supervisor about these goals, and they would identify ways to achieve these goals. Both parties evaluated these goals at the end of the financial year. Participants in this study identified the appraisal system as an opportunity for mentoring between senior and junior colleagues:

"eeeh you know you made a workplan with your supervisor so after a given period of time you are going to be appraised, in your workplan there are going to be various things to be implemented and those things, most of them you will need mentorship

from your supervisor and accountability to your supervisor so that alone, having that at the back of your mind helps you keep on track, run to them for solutions, keep engaging with them like that” (P-07).

The hospitals and the Uganda Nurses’ and Midwives’ Council (UNMC) also had continuous Professional Development (CPD) guidelines that could be harnessed and used to enhance mentoring experiences. The hospitals had schedules for monthly CPDs. The UNMC also required nurses and midwives to acquire several CPD points by the time of renewal of their practicing licence. Mentors could use the CPD system to help mentees meet their learning needs. But also, CPDs could be used to encourage senior nurses and midwives to engage in mentoring, especially if CPD points were attached to mentoring:

“Every week we have CPDs we discuss some procedures and conditions, we be updating. So people be updated about what is current. I think that the main thing” (P-12).

“you see how CPD points are added on doctors to get licences? It pushes them to actually do CPD. But if also in nurses we could have some things attached to CPD, to make people mentor one or two people this year” (P-03).

The hospitals also partner with NGOs (Non-Governmental Organisations), universities, and other implementing partners. These organisations provided training opportunities within the hospital for staff. In fact, some universities offered training about mentoring to hospital staff.

“But we have institutions like Muni university whose students we train from here, they also organise special training for preceptors who will train their students. And any other organisation who think that their people can get training or mentorship from here they can pick staff from here and train them” (P-23).

The hospitals that participated in this study were regional referral hospitals that were training institutions by virtue of their status. They received students from nursing and medical schools and universities. Intern nurses and nurses returning to practice often did short-term placements at these hospitals. These interactions provided opportunities for senior colleagues to interact with novice practitioners hence an opportunity to initiate mentoring relationships:

“Also our mandate as a regional referral hospital is to oversee the lower health facilities. Its actually a key role of the staffs working in this hospital that they mentor not only student but also counter parts working in the lower health facilities. So we consider it as for the students, it offers a teaching [learning] opportunity to them and for other that counterparts who work in the lower facilities that is from district hospital, health centre IV all through down to health centre II it serves as an opportunity to share experiences with them in terms of equipment, procedures, there

some complicated cases we do at regional level which the lower health facility people may not have an opportunity to do then we can transfer that knowledge to them” (P-23).

The employment structure consisted of health workers at various levels of seniority. Although seniority was well stipulated for the doctors, these could be sources of mentoring for the nurses and midwives, providing an opportunity for interprofessional mentoring:

“This is a referral hospital, there are so many consultants they can learn from. Me I think they have suitable environment for mentoring. We have different cadres you can’t miss someone who can help out” (P-16).

Other cadres of nursing and midwifery were also represented, providing human resources for mentoring. The participants also highlighted that although employees had few colleagues with negative attitudes and complex personalities, most nurses and midwives were approachable and willing to help others learn. The hospitals had employees with the attitudes and attributes for effective mentoring: *“not really but when I work together with other people some people are easy to approach so I know who to approach for what” (P-12).*

9.13 Chapter summary and between groups analysis.

This chapter has presented the findings of the qualitative phase of the study. These findings were in eight main themes that explained participants’ beliefs about mentoring, the need for mentoring, the roles of stakeholders, the development of mentoring relationships, the mentoring process, positive mentoring experiences, the negative aspects of mentoring, obstacles to mentoring, and opportunities for mentoring. The researcher explored the data for any patterns:

Beliefs about mentoring: Most of the subthemes on beliefs about mentoring were mainly common among the senior nurses and midwives than they were among the junior nurses and midwives. Senior nurses and midwives were more likely to believe in the internal instincts surrounding mentoring. Furthermore, the senior nurses and midwives more commonly believed in a hierarchical nature of mentoring, stressing that mentoring was done with the goal of the ‘other’ in mind—that is, focusing on the other or the patient or the community, or even helping the novices. Comparatively, junior nurses and midwives believed in a mentoring that was mutual and fluid, stating more clearly that mentoring was a two-way phenomenon.

The need for mentoring: There was a reasonably equal agreement regarding the dynamic and complex nature of clinical practice requiring continuous mentoring across the lifespan of one's clinical career. Likewise, both groups acknowledged the personal issues that require mentoring to help individuals cope with the stress of working in the clinical area. However, senior nurses and midwives believed more in the potential for mentoring to overpass the professional issues in nursing and midwifery.

Development of mentoring relationship: The findings reveal informal approaches to mentor-mentee selection that were based on mutual attraction, direct approach by either party, and/or as part of daily workplace responsibilities. Although not mandated, mentoring for the nurses and midwives in hospitals was expected and included strategies such as individual one-on-one mentoring and group mentoring. Occasionally, participants engaged in formal mentoring between units/wards or different facilities. Furthermore, to develop mentoring relationships, the nurses and midwives had to demonstrate certain qualities consistent with mentee and mentor roles. Mentee qualities were specifically more critical for the senior nurses and midwives, while the qualities of the mentor were of equal importance to both the junior and senior nurses/midwives.

The mentoring process: Beyond mentoring as a relationship, participants experienced mentoring as a process for which there are responsibilities of the mentor, mentee, and the organisation. Consistent with the earlier themes, senior nurses and midwives were accustomed to the hierarchical nature of mentoring in which competencies and support are passed down to the junior nurses. This is demonstrated through very few senior nurses and midwives believing in the responsibilities of mentors in a mentoring relationship. Furthermore, senior nurses believed the organisations were key players in mentoring relationships. Both senior and junior nurses & midwives equally considered mentors' responsibilities central to mentoring.

Positive experience realised from mentoring: The positive experiences were realised via mentoring benefits. The benefits of mentoring for the mentor's role were experienced more by the senior nurses and midwives, while the benefits of the mentee role were popular among the junior nurses. Surprisingly the perception that mentoring was beneficial to the organisation was only mentioned by the senior colleagues, totally unrecognised by the junior staff, and not recognised by the executive nurses.

Negative aspects of mentoring: negative mentoring experiences were experienced equally by the senior and junior nurses and midwives. The junior staff felt the impact of negative mentoring more than the seniors did, and they, therefore, had to devise mechanisms to cope with the bad mentoring.

Obstacles to mentoring: Challenges affecting mentoring for nurses and midwives were attributed to the organisation and individuals. Workplace deficits included limited infrastructure, a lack of mentoring standards and guidelines, and limited human resources. Individual barriers to mentoring arose mainly from difficult mentor-mentee personalities, poor attitudes towards mentoring, and overall unwillingness to engage in mentoring by both mentees and mentors. The patterns of these obstacles to mentoring were consistent; for example, senior staff attributed the obstacles to the organisation and the mentees, while the junior staff attributed the mentoring challenges primarily to the mentors.

Opportunities for mentoring in the workplace: Junior nurses and midwives appeared more optimistic about mentoring than their senior colleagues; they believed in harnessing the existing mentoring opportunities within the hospital. The opportunities ranged from existing staffing structures, the human resource appraisal systems to partnerships with NGOs and universities. These opportunities, if tapped into, could provide a good foundation for initiating, sustaining, and supporting mentoring relationships in the hospitals.

CHAPTER 10: INTEGRATION OF FINDINGS

10.1 Chapter Introduction

Chapter Six presented results from the quantitative phase of the study. While chapters eight and nine reported findings from the qualitative strand of the study. This chapter presents the integration of quantitative results and qualitative findings. This study was in two phases: Phase 1 was a quantitative survey using a cross-sectional design to determine mentoring dimensions and their associated factors among the nurses and midwives. The findings from the second phase of the study explain the results of phase one by confirming, expanding, and in some instances producing findings discordant from earlier quantitative surveys. The premise of a mixed-methods sequential explanatory design is that the study is conducted in consecutive phases, the phases are connected, and results from the two phases are integrated (Creswell & Clark, 2018). In this study, phase one results informed the sampling of phase two of the study in a process called connecting. Methods and results from the two phases have been reported separately in this thesis, staged approach to integration. The integration of results informs the last step in the sequential explanatory design. This study's integration of results was achieved through meta-inferences (Tashakkori & Teddlie, 2008). Findings from the second phase have provided clarification and explanation to results from the first phase of the study. This chapter presents four meta-inferences: 1) informal mentoring, 2) positive mentoring experiences, 3) negative mentoring experiences, and 4) the association between mentoring experiences and other workforce factors. These integrated findings are shown in Table 10.1 and detailed in the following sections.

10.2 Informal mentoring

Policy documents from Uganda did not explicitly show any existing formal mentoring programs. However, the participants in phase one of the study stated that they had participated in informal and formal mentoring (57.8%). Exploring this result in the qualitative interviews explained these results. Formal approaches to mentoring supported by the Ministry of Health (MoH) and partner Non-Governmental Organisations (NGOs) were inter-facility and inter-unit clinical supervision. The goal was to ensure that care and patient management met set standards and guidelines. Preceptorship was another variant of the formal mentoring present in the qualitative data during which senior nurses engaged in teaching, learning, and

assessing nursing students. This was done in partnership with the universities and nursing schools. It is essential to acknowledge that clinical supervision and preceptorship do not meet the typical criteria for formal mentoring. However, clinical supervision and preceptorship are activities in mentoring and may constitute brief mentoring episodes, respectively (Launer, 2018; Mills et al., 2005; Yonge et al., 2007). Therefore, primarily the qualitative dataset showed that mentoring was informal and described as non-mandated, circumstantial, and incidental. In other words, mentoring activities in Uganda hospitals described by participants in the qualitative study were not implemented according to the definition of formal mentoring programs described in the literature (Giacumo et al., 2020; Jakubik et al., 2017; Mullen & Klimaitis, 2021).

10.3 Positive mentoring experiences

Two main domains of positive mentoring consist of *individual influence* and *relational quality*. For this domain, the integrated findings show divergent outcomes. The nurses and midwives reported relatively high levels of *Individual Influence* ($M=5.49$, $SD=1.15$) in the quantitative phase of the study.

Furthermore, the quantitative dataset had no observed differences among demographic groups. The qualitative findings expound on these results by explicitly delineating mentor and mentee responsibilities in a mentoring relationship. Mentors were responsible for developing the clinical competencies of the mentee, monitoring their mentoring needs, and availing opportunities to address these needs. They also supported mentees to advance their careers and provided psychosocial support to them. A category within the mentor responsibilities that is remarkably consistent with *the Individual Influence* factor reported in the quantitative results was modelling good practice and being inspirational to the new graduates and practitioners returning to practice. On the other hand, the qualitative findings showed that mentees were responsible for taking the initiative to identify their mentoring needs and the mentor to help them address those needs. Furthermore, mentees were responsible for determining the relevance of the mentoring received, mirroring the mentoring through a change in practice and professional behaviour, and being exemplary to other nurses and midwives.

The second category in the positive mentoring domain, *Relational Quality*, produced discordant findings between the quantitative and qualitative strands of the study. For example, the quantitative results showed high levels of *Relational Quality* ($M=5.52$,

SD=1.02), whereas findings to characterise these relational quality experiences were largely absent in the qualitative findings. Instead, interview participants acknowledged that relational aspects of mentoring, such as trust and respect, are necessary and desirable qualities among stakeholders in a mentoring relationship. Moreover, the qualitative findings explicitly showed experiences of difficult relationships between the mentors and mentees characterised by disrespect and feelings of being undermined and unneeded by the mentees. At the same time, mentees described their mentors as being rude, quarrelsome, fault-finding, and belittling.

10.4 Negative mentoring experiences

Negative mentoring experiences and perceptions were of two forms: negative mentoring as experienced by the mentee (*Lack of mentor expertise* and *Mismatch between dyad*); and negative mentoring as perceived by the mentor (*Risk to reputation*, *Nepotism*, and *Mentoring effort*). The quantitative and qualitative findings in this domain were mainly in agreement.

Participants reported low levels of *Lack of mentor expertise* ($M= 2.25$, $SD= 0.684$; the lower the score, the better the mentor's expertise). However, the *Lack of mentor expertise* was greater for nurses and midwives with more than five years of professional experience and those that worked in public hospitals. Qualitative findings explained these findings by expounding—more details regarding expertise unfolded in the interviews. Nurses and midwives view mentor expertise through the lenses of years of professional experience, age, qualifications, and possessing a specific or unique skill set. These findings indicate that it was often difficult to evaluate expertise using one parameter if the nurse/midwife had lower qualifications but extensive experience in their practice areas. There was a possibility of every clinician being an expert in their own right and can contribute to mentoring programs if the program makes use of their strengths.

Integrated findings on *the Mismatch between the dyad* were complementary. *A mismatch between the dyad* was experienced in moderate levels in the quantitative phase ($M=3.73$, $SD= 0.766$; highest possible score is 5). The qualitative interviews showed that Mismatch was based on gender, generation, and tribal or ethnicity Mismatch. For example, female clinicians were not comfortable being in a mentoring relationship with male nurses/midwives.

Risk to reputation as negative perception about mentoring was moderately perceived ($M=4.67$, $SD= 1.47$; the highest possible score is 7) with significant differences in groups with different levels of qualification. The quantitative results showed that nurses and

midwives with a certificate or diploma as the highest qualification were more likely to perceive mentoring as a risk to their reputation. Qualitative findings provided insight into this by showing that these clinicians were holding back on sharing knowledge and skills for fear of losing out on subsequent promotion opportunities. In other words, new graduates with bachelor's degrees or higher had higher career promotions and opportunity prospects. Furthermore, the senior nurses/midwives felt undermined based on qualifications, physical attributes, and generational differences.

The *Mentoring effort* measures the time and energy it takes to mentor others and is an indicator of the mentor's willingness to contribute to the nursing and midwifery workforce development. In this study, participants' perception of the *mentoring effort* was low ($M=3.58$, $SD= 1.50$). This finding was explored in the qualitative study. Participants reported that heavy workloads, competing demands on their job, an overwhelming number of mentees, and a low staffing level contributed to the participant's perception of the mentoring effort. Overall, most of the participants believed in the benefits of mentoring. Furthermore, participation was based on the purpose and need for it. These internal drives for mentoring superseded the perceived cost of mentoring hence the low levels of mentoring effort found in the quantitative phase of the study.

The final category of negative mentoring was Nepotism which was perceived at a low level ($M= 3.69$, $SD= 1.42$; highest possible score is 7). The junior nurse/midwives particularly expressed that mentors had favourites among their pool of mentees. Comparatively, the senior clinicians also perceived that their physical attributes determined if they attracted a good mentee. Mentors felt evaluated on age, gender, physical attributes, and tribe hence the perception the mentoring as a form of expressing favouritism. Therefore, the qualitative findings explained the current levels of perceived favouritism.

10.5 The association between mentoring experiences and other workforce factors

Three dependent variables were measured in the quantitative phase of the study: willingness to participate in future formal mentoring programs, intention to stay working for the same organisation, and intention to advance a career. Overall, nurses and midwives were moderately willing to participate in future formal mentoring programs ($M= 6.8$, $SD= 2.86$); however, there was no direct relationship between current mentoring experiences, positive or negative, with the willingness to participate in future formal mentoring programs. Qualitative

findings expounded on this result by showing that nurses' and midwives' intentions to participate in any mentoring relationship were informed by their beliefs about mentoring and their perceived need for mentoring. The clinicians believed mentors were 'born' relying on their internal instincts to mentor; they believed in mentoring for 'self', clearly aware that the mentee as a junior nurse/midwife would one day be their clinician if roles reversed. Participants believed in mentoring for 'the other', that is, the patient and the larger community.

In the qualitative strand of the study, mentors' decisions surrounding mentoring were centred on the need for mentoring. In the interviews, the clinicians talked of the complexity and dynamic nature of the hospital setting requiring mentoring to maintain practice standards. Participants also described the role of mentoring in salvaging the societal image of the profession and explained the personal need for mentoring. The qualitative findings expounded on this domain of integrated findings, justifying the non-significant relationship between current mentoring experiences and willingness to mentor and receive mentoring. The study also explored the relationship between positive and negative mentoring and clinicians' intention to stay working for the same organisation, as well as their intention to advance their careers. The non-significant relationship remained unexplained in the qualitative findings; therefore, no meta-inferences emerged from the integrated findings for the two dependent variables.

Table 10.1 Showing joint display of the meta-inferences drawn from the quantitative and qualitative findings.

Variables	Quantitative results	Qualitative findings	Integration (expound, confirmation, or discordant)
Meta-inference: Informal mentoring			
Informal mentoring	<p>The distribution of type of mentoring was a follow: Informal mentoring 28.2% Formal mentoring 14.0% Both 57.8%</p> <p>Received training in mentoring: Yes 45.5% No 54.5%</p>	<p>Only one out of the five participants reported formal mentoring:</p> <p><i>"Even in the employment process it's not enforced. Ok you can support but then it's not that its mandatory, it's not mandatory that I must, whoever you find, ... it is not part of whatever is enforced that you must do it: like as you come duty like you must manage, you must treat patients; so it's not mandatory that you must teach, you must mentor, no"</i> (P33)</p> <p><i>"We do inter-unit visits, these exchange-visits like I am in under five, we can go to paediatric ward or medical ward we learn from them, and they learn from us we share experiences regarding different activities. And they are also able to tell us several things which we don't know"</i> (P19).</p>	<p>Expound</p> <p>The formal approach to mentoring was inter-facility clinical supervision funded and supported by MOH and partner NGOs in the regions.</p> <p>The second formal approach was preceptorship supported by partner universities and schools.</p> <p>The nurse-to-nurse or midwife-to-midwife (and variants of) was largely non-mandated, circumstantial, and occurring in the form of short mentoring episodes.</p>
Meta-inference: Positive mentoring experiences			
Individual influence	<p>High level of <i>individual influence</i> experienced by the nurses and midwives (M=5.49, SD=1.15).</p> <p>There were no significant differences between/among groups for gender, qualification, professional experience, type of facility, training</p>	<p>Mentor influences</p> <p>Mentees were coached on <i>"daily things we do like the process of admission of patients, discharging patients, referring patients, taking the vitals in general monitoring the patients, recording the drugs in the dispensing book, giving treatment those kind of things"</i> (P18).</p>	<p>Expound</p> <p>Qualitative data delineates mentor and mentee responsibilities in a mentoring relationship.</p> <p>Mentors:</p> <ul style="list-style-type: none"> Develop clinical competencies of the mentee. Keep an eye on mentoring needs and opportunities.

Variables	Quantitative results	Qualitative findings	Integration (expound, confirmation, or discordant)
	for mentoring and professional registration for <i>individual influence</i> .	Mentee influences <i>"ok me my role of course I would take the advice they have given me but also my role is to determine whether their advice is ok with my needs. My mentor can tell me something, but I feel it's not right I can also tell them why we don't do it this way, isn't it better?" (P20).</i>	<ul style="list-style-type: none"> Responsible career progression of mentee. Psychosocial support. Model good practice and inspirational. Mentees: <ul style="list-style-type: none"> Initiative to identify the need and the mentor. Determine relevance of the mentoring received. Mirror the mentoring: change in behaviour and be exemplary.
<i>Relational Quality</i>	<p>High degree of Relational Quality (M=5.52, SD=1.02) experienced by the participants.</p> <p>There were no significant differences between and among groups for relational quality. Concepts studied included communal norms, shared influence and respect and trust and commitment</p>	<p>The experience of Relational quality was not reported.</p> <p><i>"I have to respect my mentor. You have to show it [respect]" P31.</i></p> <p><i>"For me I can put a cannular and you have a bachelor's degree and me a certificate and cannot put a cannular. For you what we're studying?" (P12).</i></p> <p><i>"the people[mentees] are unappreciative which is expected because all of us are unique we don't expect people to react the same way. And then sometimes, yes, the ungratefulness in some people" (P-03).</i></p>	<p>Discordant</p> <p>The actual experience of relational quality was not reported in the qualitative findings. Instead, participants acknowledge that relational quality aspects of mentoring such as trust and respect are necessary and desirable qualities among stakeholders in a mentoring relationship.</p> <p>Most commonly, the qualitative findings explicitly show a difficult relationship between the mentors and mentors characterised by disrespect and feelings of being undermined, and unneeded by the mentees. And mentees described their mentors as being rude, quarrelsome, fault finding, and belittling.</p>
Meta-inference: Negative mentoring experiences			
Lack of mentor expertise	<p>The participants experienced low levels of the <i>Lack of mentor expertise</i> (M=2.25, SD=0.684). These experiences were greater for participants with:</p> <ul style="list-style-type: none"> >5years of professional experience For those working in public hospitals. 	<i>"It's not always that mentors are experts you have to be careful with that. You have to be willing to learn and adjust accordingly" (P22).</i>	<p>Confirmation</p> <p>Expertise was viewed through the lenses of years of professional experience, age, qualifications, and skill set.</p>

Variables	Quantitative results	Qualitative findings	Integration (expound, confirmation, or discordant)
Mismatch between the dyad	The nurses and midwives on average felt a <i>Mismatch between the dyad</i> (M=3.73, SD=0.766). The following participants felt more mismatched than respective counterparts: <ul style="list-style-type: none"> Female diploma/certificate participants >5years of professional experience. 	<i>"Another thing that affects mentoring one of it I had talked about is ...tribalism you find the other feels much more comfortable mentoring his or her tribemate and can give him or her everything and when she or he is mentoring you and you are different tribe, and there are some tribes that are against each completely and when they realise you are from that specific tribe cannot feel open to give you all the required information"</i> (P-30)	Confirmation Mismatch was based on gender, generation, and tribe/ethnicity
Risk to reputation	Moderately perceived at M=4.67, SD= 1.47 Significantly higher perceptions for participants with diploma or certificate.	<i>"and you are working with[mentee], and they are at the same level with you or some are better than you because sometimes you mentor people they become better than you in certain aspects, which can make someone be negative"</i> (P-24).	Confirmation Holding back on knowledge sharing to protect their positions in the organisation
Mentoring effort	Perceived at M=3.58, SD= 1.50 Significantly higher for: <ul style="list-style-type: none"> diploma/certificate participants >5yrs of professional experience groups 	<i>"The nurses, the hospital is using the old staffing norm of general hospital, the nurses are not enough, there is a lot of work and so many project are brought in but the personnel is not there"</i> (P-22).	Confirmation Qualitative findings show a heavy workload, competing demands on their job, some mentors being described as lazy, overwhelming number of mentees, and lack of enough staffing as some of the issues contributing to perceived mentoring effort.
Nepotism	Quan: Perceived at M= 3.69, SD= 1.42 Significantly higher for females.	<i>"May be sometimes they look at the height, the weight and they say... now this one what can she do?"</i> (P-01).	Confirmation Qualitative findings explain forms of nepotism as favouritism, ageism, genderism, and tribalism e.g., mentors felt they were being judged based on their physical attributes
Meta-inference: The association between mentoring experiences and another workforce factors			
Willingness to participate in future formal mentoring programs	Nurses and midwives were moderately willing M= 6.8, SD= 2.86 Factors that were significant: <ul style="list-style-type: none"> Having a bachelor's degree or higher (b=0.817) Training in mentoring (b=0.891) 	<i>"I think, mine[motivation] was an instinct. Once you are already a nurse and a midwife there is that instinct really. I want to see you [mentee] do it like a nurse, I want to see you do it like a midwife. Aaaaa I think it was just in-built in me"</i>	Expound Qualitative findings showed motivation to mentor was based on inner drive based on beliefs and the need for mentoring. Beliefs and perceptions <ul style="list-style-type: none"> Mentors are born (expound) Mentoring for self (expound)

Variables	Quantitative results	Qualitative findings	Integration (expound, confirmation, or discordant)
	<ul style="list-style-type: none"> Negotiated exchange orientation (b=-0.208) No direct association with mentoring experiences	<i>that a nurse is supposed to do like this</i> [mentor].” (P1).	<ul style="list-style-type: none"> Mentoring for the other (expound) Paying it forward (discordant finding) Need for mentoring. <ul style="list-style-type: none"> Clinical need (expound) Professional need (expound) Personal need (expound)
Intention to stay working for same organisation	Moderate intentions to stay was M=6.13, SD= 3.08 Factors that were significant: <ul style="list-style-type: none"> Having a diploma or certificate as highest qualification (b=2.06) Working for a public hospital (b=1.19) Negotiated exchange (b=-0.374) No direct or indirect relation with mentoring experiences (positive or negative mentoring)	Not evaluated in the qualitative phase	Inconclusive No meta-inference drawn due to insufficient data
Intention to advance career	Moderately high intentions M= 7.97 (SD= 2.42) Factors that were significant: <ul style="list-style-type: none"> Professional experience, more than 5years of clinical experience (b=-0.843) General self-efficacy (b=1.35) There was no direct association with the mentoring experiences.	Not evaluated in the qualitative phase	Inconclusive No meta-inference drawn due to insufficient data

10.6 Chapter summary

The study aimed to characterise mentoring for nurses and midwives working in hospitals in Uganda. Using the sequential explanatory design, the study identified positive and negative dimensions of mentoring. The qualitative study explains these by confirming, expounding, and some cases producing findings discordant to the phase one results. The qualitative findings also highlight that mentoring was essentially informal and aspects of formal mentoring described were consistent with mentoring activities, not formal mentoring relationships. The study shows inconclusive findings on the relationship between current mentoring experiences and career or turnover intentions.

CHAPTER 11: DISCUSSION OF FINDINGS

11.1 Chapter Introduction

This chapter builds on previous chapters by discussing the results from the quantitative and qualitative phases in light of current literature. Using Dewey's pragmatism, the researcher designed a study using a mixed methods research design to explore nurses' and midwives' perceptions and experiences of and factors associated with mentoring in Uganda hospitals. Chapter eleven begins with an overview of the study, comparing findings from the present study with similar studies reported in the literature, and culminates into a suggested framework for future mentoring.

11.2 Overview of the study

The mixed methods study aimed to characterise mentoring for hospital nurses and midwives in Uganda. The specific objectives of the study were:

- To determine the mentoring dimensions among the nursing and midwifery workforce in hospital settings in Uganda.
- To determine the factors associated with various mentoring dimensions among the nursing and midwifery workforce in hospital settings in Uganda.
- To assess perceptions, experiences, and expectations of nurses and midwives towards mentoring in hospital settings in Uganda.

This study makes a significant original contribution in four distinct ways. Firstly, it characterizes mentoring within the context of nurses and midwives working in hospital settings. This unique contribution adds to the existing literature by exploring in-service mentoring, explicitly focusing on mentoring for nurses/midwives in clinical practice. It is important to note that most existing mentoring literature primarily focuses on pre-service mentorship for students in programs such as preceptorship and internship (Ssemata et al., 2017).

Secondly, the study contributes to the body of literature on mentoring for nursing and midwifery professionals in Uganda. As demonstrated in Chapter One, mentoring aimed explicitly at supporting novice nurses/midwives is absent within the Ugandan context. The literature review in Chapters Two and Three also indicates that mentoring in developing

countries often emphasises certain activities, such as clinical supervision and evidence-based practice, centred around knowledge and skill acquisition (Hoover et al., 2020).

Thirdly, the study reveals that mentoring for nurses and midwives in Uganda is predominantly informal, consistent with findings from other sub-Saharan African studies (Sawatsky et al., 2016). While informal mentoring exists within the nursing and midwifery workforce, it is rarely studied and reported in the literature (James et al., 2015). As a result, there is limited evidence to inform workforce development planning through formal mentoring programs. The study also highlights the lack of organisational commitment to recognising and rewarding mentoring efforts. Additionally, participants in this study expressed that they relied on internal motivation to initiate and sustain mentoring relationships.

Lastly, the study sheds light on the individual and organisational contexts and their influence on mentoring outcomes. By exploring these contextual factors, the study provides valuable insights into how they shape the effectiveness of mentoring interventions. Overall, this study's original contributions extend the current understanding of mentoring in nursing and midwifery, particularly within the Ugandan context, and emphasise the importance of considering individual and organisational factors in designing effective mentoring programs. In the following sections, the main findings are discussed in the following four subheadings—first, the key mentoring dimensions experienced by participants. Second is the relational and organisation context of mentoring, particularly in Uganda. In addition, the researcher proposes a mentoring framework for future mentoring, formal or informal, for nurses and midwives in Uganda's hospital settings.

11.3 Key mentoring dimensions for nurses and midwives

The mentoring dimensions are key aspects that characterise mentoring relationships. This section discusses the aspects considering existing evidence and informed by the theories of importance to mentoring.

Mentoring roles

The interaction of mentor and mentee was occasionally described as a process in which each individual in the mentoring relationship had a set of roles, responsibilities, desirable qualities, and actual benefits attached to mentoring. The identified roles of the mentor and mentee in this study were delineated. The mentor was a manager, supervisor, or senior nurse/midwife.

At the same time, the mentee was a subordinate, junior nurse/midwife, or student. The roles were consistent with the literature (McSwain, 2011; Rohatinsky et al., 2018; Zhang et al., 2019) but highlighted that a mentee is not always a young novice nurse/midwife. The roles acknowledge that the nursing and midwifery profession comprises members at different levels in their careers. This implies that depending on the circumstances, the mentor can be the mentored (Jacobs, 2018). This emphasises the reciprocal nature of mentoring. The various roles in mentoring attracted responsibilities and functions for the mentor and mentee.

Mentoring functions and responsibilities

The study further reports on mentoring functions and responsibilities. The relational functions of mentoring, particularly *Individual Influences*, were measured in the quantitative study using the Relational Mentoring Index scale. *Individual Influences* included personal learning and growth, inspiration, and self-affirmation (Ragins, 2012). Findings in the present study showed a means score of 5.49, indicating relatively high levels of *Individual Influences* experienced by the nurses and midwives. This mean score is three times higher than the level found among nurses experiencing formal mentoring in USA hospitals (Murphree, 2022). This could be attributed to the spontaneous nature of informal mentoring in which clinicians choose the colleague from which they can benefit the most (Mohtady et al., 2016). This finding adds new knowledge to the literature that informal mentoring has the potential to result in competitive experiences as those realised from formal mentoring. Moreover, in the present study, *Individual Influences* were experienced equally among the nurses and midwives, with no significant differences between senior and junior nurses/midwives. This finding could be explained by the fact that everyone in the mentoring relationship influences on the other regardless of the roles they occupy in the relationship, affirming the bi-direction nature of relational mentoring identified by some authors (Jacobs, 2018; Ragins, 2012).

The qualitative findings in this study revealed additional responsibilities specific to the mentor and mentee roles. For the mentor, these responsibilities aligned with the traditional mentoring functions of career development and psychosocial support (Hale & Phillips, 2019; Kramer et al., 2021). This study categorises the career functions in the mentor role as those geared towards developing competencies such as teaching and coaching and those directed toward career progressions such as appraising and recommendations. Participants in this study were further aware of the stressful nature of clinical work; thus, they reported the role of psychosocial support from the mentor. This finding is consistent with studies on

occupation stress among nurses and midwives (Mousavi et al., 2017; Wright, 2018). Mentors provided encouragement, helped nurses/midwives deal with difficult clinical situations, and provided personal emotional support to enable their colleagues to maximise their potential in the workplace. Previous studies have shown that clinicians preferred to receive psychosocial support from people with whom they had professional similarities (Shin & Lee, 2016). Psychosocial support is vital in the longevity of nurses and midwives in the profession due to the stressful nature of nursing and midwifery practice (Wang et al., 2018).

In the present study, the responsibilities of the mentees were centred around initiating mentoring and demonstrating progress in their career or clinical expertise. This finding was consistent with the previous study that reported mentees' expectations in various mentoring programs in the clinical area (Wisseemann et al., 2022). However, the present study also found that mentors were also expected to be keen in identifying the need for mentoring among the mentees and be on the look for learning opportunities within the organisation to meet the mentoring needs. The findings support the previous study that described developing a mentoring relationship as a shared responsibility of the mentor and mentee (Washington & Cox, 2016).

Desirable qualities for the mentor and the mentee

In the present study, the senior and the junior nurse/midwife identified certain qualities to enable them to perform their roles and execute their responsibilities. Although the participants were specific about the desirable qualities for the mentee and mentor separately, these characteristics can be grouped into three broad cross-cutting groups: inspirational qualities, competencies for mentoring, and individual readiness/willingness for mentoring. The inspirational qualities were specific to the mentor role and aligned with a previous study that mentors' inspiration and role modelling activities are the two core functions of mentoring (Washington & Cox, 2016). Nurses and midwives owing to their vast experience and excellent practice skills, make them admirable to their colleagues. Some nursing and midwifery knowledge and professional attitude is, in fact, tacit, built over years of experience, and may be challenging to teach and coach but is often modelled (Fackler, 2019). Modelling standardises practice and is essential for sustaining the social image of the professional. A study found that modelling can also sometimes demonstrate bad behaviour (Vinales, 2015). Such unintended consequences underscore the need to train mentors in both informal and formal mentoring programs to ensure a positive influence in the mentor-mentee

dyads. Mentors need to be exemplary in their work. Mentoring activities must be structured, organised, and principled to achieve positive outcomes for all stakeholders. The unintended consequence of mentoring activities also underscores the need to develop formal mentoring programs so mentors are carefully selected based on the selection criteria and their behaviours are monitored through program evaluation.

Desirable competencies for mentors and mentees in future formal mentoring programs were described in this study. The mentees were expected to have a basic level of competencies, while the mentors were expected to show an advanced level of competencies in an area of practice. The competency assessment for mentoring usually includes relevant qualifications, professional experience, clinical expertise, mentoring abilities, and leadership and management capabilities (Hishinuma et al., 2016; Tuomikoski et al., 2020). Knowledge of mentoring practice has also been identified as an essential attribute for mentors (Alidina et al., 2022). In addition to the competencies, mentors must have the motivation to teach and demonstrate a willingness to share their knowledge.

Hence, readiness to engage in mentoring was desirable for both the mentee and mentor roles. Readiness relates to the nurse/midwife's willingness and ability to receive and give instruction and adapt to new knowledge and skill (Pham et al., 2019). In this study, mentees were expected to demonstrate readiness for mentoring by being willing to learn and engage in the whole mentoring process, taking on an active role in identifying a mentor, having clear mentoring goals for the mentoring relationship, and being reflective on practice. Moreover, the mentor was expected to demonstrate a willingness to mentor others and observe the mentee's practice. Willingness, along with other competencies for mentoring, provides the basic grounds for the initiation, maintenance, and dissolution of the mentoring process (Barker & Kelley, 2020). For example, a willing and capable mentee seeks out a mentor willing to engage in mentoring—initiation; they both put in the hard work to engage in the process of exchanging knowledge and skill—maintenance, and once the mentee's goals have been achieved, then the process can be dissolved (Barker & Kelley, 2020; Washington & Cox, 2016).

The quantitative results in the present study revealed a moderate to high level of willingness to engage in formal mentoring for nurses/midwives working in hospitals in Uganda. This finding is consistent with the literature, which described that having a bachelor's degree and prior training in mentoring predicted their readiness, including their willingness and their

capabilities/or competencies for mentoring (Tuomikoski et al., 2020). Previous literature shows that mentoring training is a means to provide the necessary information to develop an interest in mentoring (Feyissa et al., 2019; Witter & Manley, 2013). Training for nurses and midwives can be strategically designed to emphasise the numerous benefits of mentoring while equipping participants with the essential skills necessary for effective mentoring practice. By focusing on these key aspects, such training initiatives can establish a solid foundation to generate interest and foster a genuine commitment to the mentoring process.

Interestingly, in this study, having received *Individual Influences* from informal mentoring was not associated with future intentions to participate in formal mentoring. In other words, passing experiences in mentoring do not seem to inform the nurse/midwives' decision to engage in mentoring practices. This finding differs from a study on a formal mentoring program in that engaging in mentoring programs does predict intentions to mentor others for nurses and midwives (McBride et al., 2019). The possible reasons for the lack of association between informal mentoring and willingness to participate in future mentoring in the present study can be attributed to a lack of organisation commitment often missing in informal mentoring relationships. The organisation's role in mentoring is to provide mentoring education, mentoring program coordination, and instrumental rewards (Giacumo et al., 2020). Instrumental rewards in mentoring include career benefits such as promotions and organisation benefits such as recognitions (Liu et al., 2021); these contribute a pathway out of mentoring relationships, informing clinicians' extrinsic motivation to mentor others. In the absence of instrumental rewards, nurses, and midwives look into their intrinsic drive to find reasons to mentor that are unrelated to previous mentoring experiences. The qualitative findings in this study showed that motivations to mentor were centred around the need for mentoring and personal beliefs about mentoring. Therefore, the lack of a direct relationship between current mentoring experiences and future intentions to participate in mentoring may be due to the lack of the organisation's support.

Negative mentoring experiences

Although mentoring is largely made up of activities aimed at a positive formal or informal experience, in some instances negative behaviours between the mentor and mentee have been reported (Carr & Heiden, 2011; Huang & Weng, 2017). In the present study, the quantitative strand revealed four dimensions of negative mentoring: *lack of mentor expertise, risk to reputation, nepotism and energy drain*. These negative mentoring were reported in other

studies among nurses/midwives (Green & Jackson, 2014; Khunou, 2018). In the present study, the *lack of mentor expertise* was experienced more by the senior nurses and midwives working in public hospitals. This is consistent with the traditional definitions of mentoring for which the mentor is always senior (Mullen & Klimaitis, 2021). It is important to note that expertise in the clinical area is multifaceted. Mentor expertise is built over the years spent in clinical practice and the qualifications of the clinicians (Hoover et al., 2020). In fact, the qualitative findings in this study revealed a consistent trend showing expertise was based on clinical competencies, qualifications, and ability to mentor others. Therefore, mentoring relationships can be set in such a way that they are made up of individuals at varying levels of these forms of expertise. Furthermore, mentoring training can focus on demonstrating the complexity of expertise in clinical practice emphasizing the benefits for mentors.

Although mentees often seek out nurses/midwives prominent in the profession and the organisation (Henry-Noel et al., 2019), mentors are often concerned about the overall impact mentoring has on their professional and organisation status, as shown in this study. Participants reported a moderate perception that mentoring others could risk their reputation within the organisation and among their peers. This was elaborated by participants in phase two of the qualitative study. For example, they described that the senior nurses mostly had lower qualifications while the junior nurses had higher qualifications but fewer years of professional experience. Mentoring junior nurses meant they had higher prospects for expedited career promotions and growth than their mentors. This made senior nurses/midwives hesitant to mentor. Similar findings were identified in the quantitative results in which the nurses/midwives with a certificate or diploma as their highest qualification perceived that mentoring impacted their reputation significantly more than those with a bachelor's degree and higher. Similar concerns about their reputation in mentoring relations were reported in another South African study (Khunou, 2018). The commonality between this study and the study by Khunou (2018) is that both studies are done in Africa. The nursing and midwifery workforce has particular characteristics, with the majority of the clinicians in hospitals having a certificate or diploma as their highest qualification (World Health Organisation, 2020a, b). In the spirit of harmonising the nursing/midwifery workforce in the East African region (Bryant et al., 2022; World Bank Group, 2020), the MoH in Uganda is actively implementing a scheme of service indicating clear roles of nurses and midwives and their required qualifications (The Republic of Uganda, 2017). The scheme of service has perceived implications for practice regarding the career progression of the

nursing/midwifery workforce. Junior nurses/midwives with higher qualifications are more likely to progress faster in their clinical career ladder. This leaves the senior but less qualified nurses/midwives with limited career advancement options within the organisations. This threatens their expertise built over years of experience with the risk of making it inaccessible to the newly qualifying nurses/midwives. In their commitment to support mentoring, organisations ought to offer career protection for these senior nurses and midwives (McPake et al., 2013). That way, senior clinicians will feel safe to share their tacit knowledge with the newly graduating nurses and midwives as their contribution to mentoring.

Biases and favouritism in a mentoring relationship have been identified in health science research (Cheong et al., 2020; Kow et al., 2020). They hold prejudices against nurses/midwives of different ethnicity and generation. In this study, language depicting ageism and ethnicism was regularly used by participants. Race, gender, and intergenerational issues and their impact on mentoring have been reported in the literature (Mullen & Klimaitis, 2021). However, within contexts with various ethnicities, such ethnic differences become of importance to mentoring. Notably, Uganda has more than 50 ethnic tribes hailing in different regions. Although employment in the nursing workforce is not based on ethnicity, these issues affect workplace dynamics (Zakumumpa et al., 2021). In this study, mentees preferred mentors from a particular generation and sometimes were hesitant to engage in mentoring with a different gender. Furthermore, tribalism was reported as an essential factor inhibiting free interaction and affecting knowledge sharing among nurses and midwives. As reported in both phases, this study adds a contextual understanding of favouritism and nepotism. Junior nurses reported that their mentors had favourites among their pool of mentees, which informed their perceptions regarding the costly nature of mentoring. This study also showed that females were likelier to perceive favouritism and nepotism.

In the present study, participants perceived a lack of time to commit to mentoring relationships; this was presented in both phases of the study. The findings aligned with a previous study that reported time is the most commonly reported challenge affecting mentoring (Lin et al., 2018). Other challenges, such as limited staffing, heavy workloads, and competing priorities, are rationing into the time that could be spent on mentoring (Merga et al., 2020; Rohatinsky & Jahner, 2016). In the present study, clinicians without a bachelor's degree and those with more than five years' experience were most likely to perceive mentoring as a time and energy-draining endeavour. The nurse-to-population ratios in Uganda have stagnated between 1.2 and 1.6 per 1000 population over the years (The World

Bank, 2020). The senior nurses have worked through these patient workloads over their years of experience. Without information about the benefits of mentoring, this professional development approach is viewed as an additional workload along with other administrative commitments. Although time as an important factor in mentoring has been reported as a big challenge, most benefits of mentoring outweigh the concerns regarding time spent mentoring (Mohtady et al., 2016; Zhang et al., 2016). Mentor/mentee training can focus on emphasising the benefits of mentoring. Other studies have reported providing clinicians with protected mentoring time (Rohatinsky & Jahner, 2016).

Other forms of negative mentoring reported in this study included hostility, jealousy, credit taking, exploitation, incompetence, time and commitment, unrealistic expectations, undermined, unappreciated and burdensome. The literature has reported these experiences (Green & Jackson, 2014; Kow et al., 2020). All mentoring activities aim to achieve good outcomes for the mentor and mentee. However, any negative experience can delay the success of mentoring, potentially affecting its effectiveness. As shown in the qualitative findings of this study, negative experiences left the mentoring pairs feeling unappreciated, undervalued and undermined. Therefore, negative experiences in mentoring ought to be evaluated, controlled for during program planning, and addressed during the implementation of these mentoring programs.

The quantitative study explored the association between mentoring experience and self-efficacy. In the present study, the perceived lack of mentor expertise had a positive association with self-efficacy. This finding contradicts the mentoring goal of developing clinicians' confidence and self-efficacy (Jnah et al., 2015). This finding relates to the Uganda context, where senior nurses/midwives held a lower level of qualification due to the history of nursing/midwifery education. In comparison, the junior nurses/midwives who sought their mentoring support held a higher level of qualification (see Chapter 1). This finding also indicates the lack of continuing education opportunities for senior nurses/midwives in Uganda hospitals.

Moreover, this result could also be explained as in informal mentoring, mentees would only be attracted to mentors if they have the competencies to help themselves achieve their goals. Therefore, there is a high likelihood that a self-confident mentee is likely to rate their mentor as lacking in essential competencies. Some studies explained that such an unintended association as a dysfunctional mentor would challenge the mentee to be a better clinician

(Carr & Heiden, 2011; Washington & Cox, 2016). The importance of self-efficacy in this study was evident in nurses'/midwives' intentions to advance their careers. Beliefs in one's ability to execute a specific behaviour significantly predict engaging in a behavioural change (Bandura, 1977) and sustaining the change in the new profession (Wang et al., 2018). Moreover, in this study, *Individual Influences* from informal mentoring were neither associated with self-efficacy nor intentions to advance a career. However, the quality of the relationship was positively associated with self-efficacy and intentions to advance career (discussed under relational context). Non-significant effects of mentoring on career dimensions have been reported before (Mariani, 2012).

Benefits from mentoring

In the present study, the qualitative strand expounded on mentoring benefits for junior and senior nurses/midwives. Apart from building self-efficacy and confidence, other mentee benefits included developing clinical leadership and management expertise, influencing career choices, growth and progress, and adapting to and coping with the clinical environment and the profession. These benefits are similar to those reported for mentees in formal mentoring programs (Jakubik et al., 2011; Wissemann et al., 2022; Woolnough et al., 2006). In the present study, mentoring for the mentors was necessary for generativity and career growth. Mentors also valued the mentor rewards and reported a reduced workload from mentoring others. The findings in this study show that informal mentoring is beneficial for nurses and midwives and tapping into the characteristics of successful informal mentoring that can inform the design of effective formal programs.

Furthermore, the present study also reveals the social benefits of mentoring. The study's participants perceived a broad category of social benefits ranging from socialising and coping in the workplace to being a well-balanced social person and having a sense of belonging. Therefore, the present study supports previous studies on formal mentoring programs that showed that mentoring plays a crucial role in the socialisation of the nurse/midwife in clinical settings (Jacobs, 2018; Norman, 2015).

The organisation as a stakeholder in mentoring

The literature empathises the organisation as an essential stakeholder in mentoring (Wissemann et al., 2022). In this study, participants identify the organisation—hospital, the principal ministry, and the regulatory body as stakeholders in mentoring. In this study, the

responsibilities of the regulatory body were described as attaching value to mentoring by contributing to the rewarding of mentoring through acknowledging those that mentor, awarding Continuous Professional Development (CPD) points to mentoring, and sanctioning the lack of mentoring among nurses and midwives. These expectations are in line with other regulatory bodies. For example, the International Council of Nursing (ICN) and the International Confederation of Midwives (ICM) have mentoring as an explicit expectation of their nurses and midwives, respectively (International Confederation of Midwives, 2014; International Council of Nurses, 2021). Furthermore, for the nurses and midwives in Uganda, the organisational role in mentoring should focus on building awareness, providing oversight coordination and supervision, initiating formal mentoring programs, mandating mentoring for nurses and midwives, and finally, defining mentoring for nurses and midwives. These are clear attributes consistent in literature for cultivating successful mentoring relationships (Giacumo et al., 2020).

A central agreement in establishing formal mentoring programs is that it provides a mechanism that ensures that every nurse and midwife receives the same support to aid their career progress (Gazaway et al., 2019). New formal mentoring programs can focus on enhancing the prescribed rewards for mentoring. For example, by creating career options for the mentored and mentors, organisations will provide a career pathway out of the mentoring programs, thereby providing a means for mentoring to influence retention of the advanced qualifications nurses and midwives in Uganda. This is particularly useful in Uganda, given that informal mentoring experiences were not associated with career intentions. Overall, the specific responsibilities of the organisation present implications for patient care and the nursing-midwifery workforce.

In the quantitative phase of the present study, participants' positive mentoring experiences measured as *Individual Influences* and *Relational Quality* did not predict intentions to stay working for the same organisation. However, the qualitative phase of the present study revealed that the participants perceived their mentors had a role in their persistence in the profession and in working for the same hospital. The unexpected findings in this study can be explained by the fact that mentoring in this study was largely informal. The qualitative findings show that only one of the 35 participants described their mentoring experience as formal. Furthermore, the literature shows that formal mentoring programs play a crucial role in recruiting and retaining nurses and midwives (Rohatinsky & Jahner, 2016; Zhang et al., 2019). Therefore, it is imperative that Uganda hospitals establish formal mentoring programs

considering the severe shortage of nurses the hospitals experience, especially in rural hospitals.

In the present study, three factors showed a significant association with intention to stay: qualifications, type of facility, and *Negotiated Exchange Orientation*. The principles of negotiated exchange describe individuals in the workplace internally evaluating costs and benefits when they commit to mentoring against possible alternatives (Cropanzano & Mitchell, 2005). The population of nurses/midwives with a bachelor's degree qualification in Uganda is still very small, constituting only 9% of the total population of nurses and midwives (World Health Organisation, 2020b). Until recently, the scope of practice for graduate nurses and role descriptions within the public service system remained undefined (Nawagi et al., 2022; The Republic of Uganda, 2017). Therefore, the majority of these nurses were employed in roles that required a diploma as the highest qualification, and therefore they were underpaid, and their skills underutilised. The potential for the efflux of bachelor-prepared nurses and midwives is based on their evaluation of better opportunities within and outside the country (Nguyen et al., 2008). Furthermore, public hospitals provide more job security, better work conditions, and better pay (Banyan Global, 2015; Konde-Lule et al., 2010), explaining the likelihood of nurses and midwives working in a public hospital to stay working for the same organisation beyond that attributable to mentoring influences.

Participants in this study reported better service delivery, loyalty to the organisation, and job satisfaction as some of the organisation benefits. Viewing the organisation as an essential entity emphasises the exchange nature of mentoring in which all stakeholders benefit from the relationship (Giacumo et al., 2020). There were professional benefits from mentoring reported in this study. These included: professional support, functioning as a full member of the profession, networking, shaping perceptions of the profession, developing clinical expertise, and developing leadership and management abilities. Traditionally mentoring has been beneficial to the individuals in the relationship; the current study emphasises the role of mentoring in building an internal and social image of the profession (Chin et al., 2020; Gazaway et al., 2019; López-Verdugo et al., 2021).

11.4 Organisational context in mentoring

An organisational culture that supports mentoring is crucial for mentoring outcomes and the effectiveness of mentoring relationships. An organisational culture in mentoring is demonstrated through instituted mentoring guidelines and formal mentoring programs

(Giacumo et al., 2020). Some authors argue that the success of formal mentoring programs is based on social exchange principles (Al-Hamdan & Bani Issa, 2022; Eby et al., 2004). A form of exchange relationship between the individual and the organisation was significant in predicting future intentions to participate in formal mentoring programs. This study evaluated this using the perceived organisation support scale (POS). POS is based on the belief that the organisation cares about the well-being of its employees (Eisenberger & Stinglhamber, 2011). Literature shows that a high POS increases the chances of the employees participating in activities designed to the benefit of the organisation as a whole (Al-Hamdan & Bani Issa, 2022; Fleig-Palmer & Rathert, 2015; Nazir et al., 2018). The present study identified a significantly positive association between POS and future mentoring intentions, which aligns with the literature.

Workplace relations and activities further impact organisation commitment (Park et al., 2016). In this study, *Individual Influences* from mentoring were positively associated with perceived organisation support. Moreover, negative mentoring experiences arising from the *mismatch between the dyad* were associated with a lower perception that the hospitals support their employees. These findings are consistent with previous literature that mentoring relationships played a significant role in building positive workplace relationships and activities (Park et al., 2016). As an important stakeholder in mentoring, there is a need for the organisation to show commitment to mentoring. In the present study, the qualitative findings revealed that organisation commitment could be demonstrated through fostering a culture of mentoring by establishing policies and procedures, availing resources, and enabling a clinical practice environment that supports formal mentoring programs. Ensuring representation of nursing and midwifery cadres in executive management or other levels of leadership promotes inclusivity which is essential for successful mentoring. These clinical environmental factors to organisation commitment are paramount to a successful mentoring relationship in the workplace (Venktaramana et al., 2023).

An organisational commitment to mentoring is also demonstrated through instrumental rewards for mentoring. Instrumental rewards for mentoring include career benefits such as promotions and organisation benefits such as recognitions (Janssen et al., 2016). Participants in the qualitative phase of the study stressed the lack of rewards and emphasised the need to recognise their mentoring efforts by the hospital management. Instrumental rewards play a significant role in creating an extrinsic drive for mentoring (Liu et al., 2021). This explains the role of the organisation's commitment to formal mentoring. However, informal mentoring

relationships such as those in this study lack these extrinsic motivations for mentoring. The nurses and midwives in this study relied on the purpose and need for mentoring.

Participants believed it was in their nature to mentor others. Furthermore, they mentored others motivated by self and the other. The “self” means mentors and mentees engaging in mentoring motivated by the benefits that will directly affect them; for example, the mentee had to provide nursing care for the mentor. While the “other” is when nurses/midwives are motivated to mentor others with the perception that mentoring benefits the other nurses/midwives or the patient and community. The internal and external drive to mentor builds into the organisation’s mentoring culture (Małota, 2017). The ‘self’ in informal mentoring reported in this study is different from the ‘self’ reported (Janssen et al., 2016) study, as informal mentoring in this study was not associated with instrumental rewards such as promotions and recognition. The ‘self’ in this study contributes to the internal drives for mentoring. The present study has added to new understandings that participants believed that mentors are born and mentoring with the self in mind. Future studies need to evaluate how these beliefs shape the quality of mentoring relationships.

To elaborate on nurses’ and midwives’ motivation to engage in mentoring, this study shows that mentoring in hospitals was based on the need for it in the hospital, in the profession, and among the nurses and midwives. The hospital’s need for mentoring was centred on the complexity and dynamic nature of the clinical practice. These findings replicate previous findings in the literature that acknowledge nursing and midwifery practice is complex and dynamic, requiring continuous learning and support (Barker & Kelley, 2020). New technologies are emerging in clinical practice as well as new diseases and care models. Complex care systems require clinicians with various skillset, while a dynamic system means there are new care models as well as disease patterns. This study, in line with other studies, acknowledges the role of mentoring in sharing knowledge and expertise. Mentoring is essential in advancing the call for quality and consistent practice in hospitals (Hoover et al., 2020; Schwerdtle et al., 2017).

This study also highlighted the professional need for mentoring. Current trends and issues in nursing and midwifery affect the profession in several ways. The student-to-instructor ratios can be overwhelming in nursing schools (Younas et al., 2019), with high turnover rates with senior nurses retiring and young nurses changing professions for various reasons. Workplace hostility is characterised by horizontal violence (Bambi et al., 2018) and negative portrayals

of the profession in media and the public (López-Verdugo et al., 2021). All these issues are highlighted in this study as issues affecting the professional, which mentoring can potentially address. This study agrees with previous findings that the goal of mentoring should be focused on issues of importance to the profession (Jacobs, 2018).

The personal need for mentoring highlights that nursing and midwifery practice is a very emotionally draining profession (Delgado et al., 2017). Literature indicates a high prevalence of burnout (Dall'Ora et al., 2020). Nurses and midwives have previously shown that mentoring is one way to cope in an environment that can weigh down the clinician. Adding to the various goals of mentoring, this study shows that mentoring is needed by the individual clinician to cope with the emotions in the workplace and find the balance between personal and workplace-related issues.

The findings as a collective show that the organisation culture for mentoring is built both from policy and the individual's beliefs about mentoring. For example, the belief that mentoring benefits the other may result in a hierarchical type of relationship while believing that mentoring benefits self may result in a reciprocal relationship. Nurses and midwives, in the absence of organisation commitment to mentoring, look into their personal beliefs to initiate and sustain informal mentoring relationships. However, this has implications for the outcomes of mentoring, as demonstrated in this study; informal mentoring experiences did not have a significant relationship with workforce outcomes.

11.5 Relational context in mentoring

Relational Quality was another distinct mentoring category experienced by nurses and midwives in Uganda. Relational aspects of a mentoring relationship, such as building rapport, taking time to interact, and trust and respect, are equally commonly reported in the literature (Jefford et al., 2021). In fact, in this study, the mean score of *Relational Quality* was a margin higher than the *Individual Influences* reported indicating a greater appreciation of mentoring as a relationship rather than a process. In the qualitative findings, respect, adaptability, tolerance, non-judgment, and openness were desirable characteristics in the mentee and mentor roles. These characteristics make individual nurses and midwives relatable and enable trust in a mentoring relationship. Trust and respect are crucial elements in relational mentoring in an African context (Sawatsky et al., 2016). Despite respect being vital for this group of nurses/midwives, it was reported to be lacking, especially among the senior

colleagues in the present study. The junior nurses felt the senior clinicians did not respect their ideas and expertise. This challenges the two-way nature of relational mentoring, which argues that mentoring has responsibilities and benefits for both the mentor and mentee (Washington & Cox, 2016).

The mismatch between the dyad in a mentoring relationship threatens effective mentoring (Ssemata et al., 2017). Mismatch arises from competing priorities, generational differences, incompatible personalities, or individual characteristics (Coventry & Hays, 2021). Individual and organisation characteristics were important in the experience of relational incompatibility in this study. Females and senior clinicians with certificates and diplomas as the highest qualification experienced a greater mismatch in the mentoring relationships. Given that females face more difficulties initiating mentoring relationships coupled with underrepresentation at management levels (Banerjee-Batist et al., 2019), they are at higher odds of ending up with incompatible colleagues in mentoring relations. Although previous studies have shown insufficient evidence for the role of human capital, such as qualification and tenure (Eby et al., 2013), this study shows that these variables were associated with negative mentoring experiences in organisations. Furthermore, the mismatch was based on stereotypes about gender, age, and ethnicity, as shown in the qualitative data. The quality of the mentoring relationship had implications for the outcome of mentoring.

Comparatively, as *Relational Quality* increased, so did the nurse/midwives' *self-efficacy*. These findings are consistent with previous findings (Choi & Yu, 2022). However, self-efficacy decreased with the experience of *a mismatch between the dyad*. This is also reported in the literature in which the quality of mentoring relationships is the main predictor of mentoring outcomes (Wissemann et al., 2022). Any form of hostility from a mentor can affect confidence in self and own abilities (Jnah et al., 2015). This is consistent with the literature, given that mentoring has always been used as a professional development approach to addressing negative workplace relationships (Washington & Cox, 2016). In the present study, nurses and midwives reported various ways of coping with poor mentoring. They survived poor mentoring in the clinical area by staying focused on the positive outcomes of mentoring, rationalising the bad behaviour, they learned to live with the negativity, and lastly, acknowledging that mentoring was worth the time. These findings align with another study that reported many ways nurses build resilience in the workplace (Han et al., 2022). The existence of resilience in the nursing and midwifery workforce may explain why negative

mentoring was associated with self-efficacy in an unexpected direction for this population of nurses and midwives. Furthermore, some portions of bad mentoring have been shown to have better mentoring outcomes (Jung & Bozeman, 2020). To ensure harmonious mentoring relationships, these findings indicate the need to build resilience and conflict resolution abilities as alternative approaches to matching dyads based on personality.

Formal mentoring programs often focus on eliminating the causes of negative mentoring experiences to increase a mentoring relationship's effectiveness (Jones, 2017; Ojemeni et al., 2017). Often because the mismatch is addressed during mentee-mentor pairing (Hameed et al., 2017), it is seldom evaluated at the end of the duration of these formal programs. However, this study shows that positive and negative mentoring experiences existed in participants, and the associations between these experiences and the outcomes of mentoring varied depending on other factors, such as resilience in participants. These results show two main points. Firstly, the quality of the mentoring relationship, as measured via the *Relational Quality* and the *Mismatch between the dyad*, is of greater association with the outcomes of mentoring than the association that arises from the parties in a mentoring relationship that *Individual Influence* and *Lack of mentor expertise*. This is reported in the literature as relational attributes in mentoring— such as mutuality, trust, commitment, and perceived similarities between dyad being a more desirable aspect of mentoring than the actual mentoring activities —such as coaching and teaching (Jefford et al., 2021; Ssemata et al., 2017). In another study, there is a similar report on the relationship between rapport and self-efficacy for nurses in mentoring relationships (Pham, 2019).

Mentoring experiences shape nurses'/midwives' perceptions of the benefits and costs of the concept of mentoring (Rutti et al., 2013). Previous research emphasises the role of past mentoring experiences as influential in shaping individual exchange beliefs (Dahlberg & Byars-Winston, 2019). The present study supports the previous study that positive mentoring experiences inform the belief that mentoring is beneficial, and the inverse can be true. For example, individual influences such as personal learning and inspiration are likely to model beliefs in social exchange in mentoring relationships. In this study, negotiated exchange mediated the relationship between the mentoring experiences and willingness to participate in future mentoring programs. It is important to note that mentoring experiences were not directly associated with the clinicians' intentions to participate in future mentoring programs.

Nurses and midwives evaluate the cost and benefits of engaging in a mentoring relationship prior to committing to formal mentoring programs. High-quality relationships generate the perception that mentoring is more beneficial and thus worth the effort (Cropanzano et al., 2017). These individuals are more likely to engage in future mentoring or to stay and keep working for the same organisation. While poor mentoring shapes one's perceived cost of mentoring. In this study, perceived costs to mentoring, as shown in the quantitative study, included mentoring others as a risk to the mentor's reputation, mentoring as a form of nepotism and favouritism, and mentoring demanding so much effort. These findings were supported by findings of the qualitative phase explaining in more detail the negative mentoring experience of stereotyping based on gender, ethnicity, tribalism, and ageism. Gender and race have been studied in mentoring literature as factors affecting mentoring (Mullen & Klimaitis, 2021). In this study, participants felt that finding a mentor was difficult because there was segregation in the workplace based on ethnicity. At the same time, mentors also found it challenging to navigate a mentoring relationship with a nurse/midwife of a different gender and generation. This highlighted that everyday negative mentoring experiences in the hospitals informed the perceived costs of mentoring. Perception of a costly mentoring relationship presents grounds for negotiation prior to decisions and commitment to formal mentoring (Rutti et al., 2013).

Beyond negotiated exchange, the researcher hypothesised that reciprocity played a vital role in nurses and midwives' intentions to mentor others. Mentoring relationships are based on direct reciprocity, where the mentee gives back favours received from the mentor (Jacobs, 2018; Yoshikawa et al., 2020) and indirect reciprocity, where the mentee pays back favours received from the mentor to other colleagues by way of paying it forward and generativity (McBride et al., 2019; Yoshikawa et al., 2020). The results of the present study reveal conflicting findings. Quantitative results showed moderate to high mean scores on reciprocal exchange orientation and generalised exchange orientation variables, indicating participants' beliefs in direct and indirect reciprocity, respectively. However, these beliefs did not associate with decisions surrounding mentoring, staying with the same organisation, and career advancement. These results are inconsistent with previous studies findings on formal mentoring programs (McBride et al., 2019). The qualitative findings in the present study support the literature study; however, they clarified that participants' intentions on whether to mentor are influenced by their belief in paying it forward and their expectation of indirect reciprocation. These findings are consistent with beliefs in indirect reciprocity. However,

evident in the findings is that current mentoring experiences are essential in shaping nurses' and midwives' beliefs and expectations of reciprocity prior to engaging in mentoring relationships.

11.6 Implications for future formal and informal mentoring

In the literature, although the observed effects in formal mentoring programs are usually low (Eby et al., 2013), the overall experience in mentoring relationships and the work environment developed through mentoring programs favours the delivery of quality and safe care. Formal mentoring programs are increasingly used to improve recruitment, retention, and career advancement and address workplace challenges in the nursing and midwifery workforce (Stanford, 2018; Wissemann et al., 2022; Zhang et al., 2016). Previous mentoring models build on each other by focusing on the organisation (Giacumo et al., 2020) or the mentor-mentee dyad (Jacobs, 2018). Based on findings in the present study and available research evidence, the research suggests a mentoring structure that optimises the mentoring benefits while avoiding unintended consequences for stakeholders involved in formal and informal mentoring. The researcher uses the mentoring egg as a metaphor to describe the required mentoring structure to foster the benefits of mentoring in the context of nurses and midwives working in hospitals. The framework is illustrated in Figure 11.1 and discussed in the following sections.

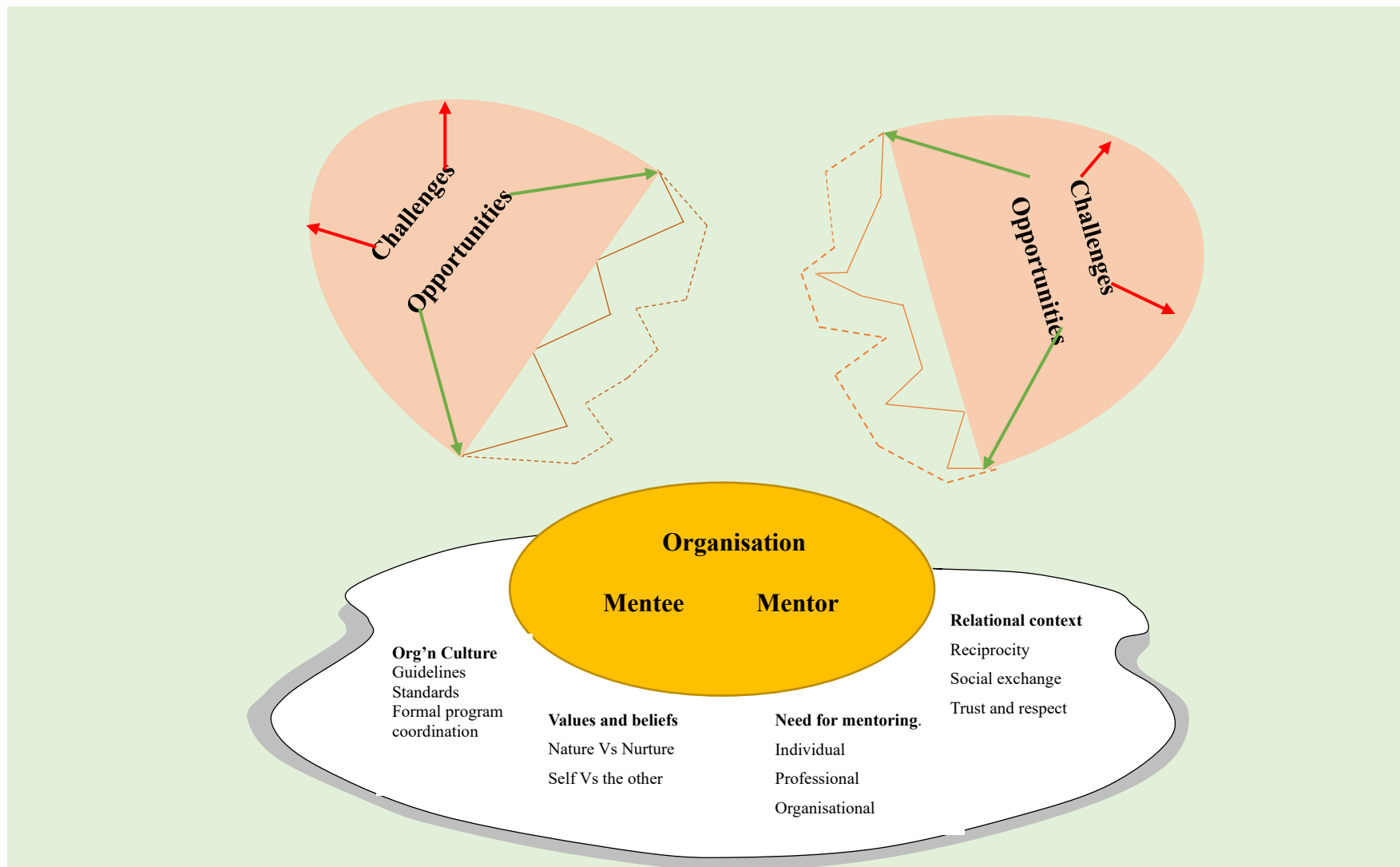


Figure 11.1 Showing the mentoring egg showing the CONTEXTUAL MENTORING framework for nurses and midwives in hospitals in Uganda.

The Egg shell.

Future formal mentoring programs and current informal mentoring activities must harness opportunities within the organisation, the profession, and among stakeholders. Furthermore, there is a need to address and control any potential mentoring challenges that may arise. Four opportunities have been identified for public hospitals to incorporate mentoring in their workforce development systems in this study: 1) nurses and midwives at different points in their careers who seek or offer mentoring; 2) the annual performance appraisal in the human resource management system; 3) external partners that work with these hospitals such as universities and Non-Governmental Organisations (NGOs) that offer mentoring programs; and 4) current Continuous Professional Development (CPD) guidelines as supported by the Uganda Nurses and Midwives Council (UNMC). All of which have the potential to support mentoring. For example, suppose UNMC explicitly mandates nurses and midwives to support novice professionals. In that case, universities can provide formal training for nurses and midwives about mentoring while the Ministry of Health can facilitate these programs.

Participants in this study brought to the surface challenges such as a lack of infrastructure. Hospitals in developing countries often face a disparity between actual and desirable clinical practice (Kakyo & Xiao, 2019; Ssemata et al., 2017). For example, one of the participants highlighted a lack of basic supplies like cord ligatures for newborn infants. Nurse/midwifery mentors face dilemmas between teaching novice nurses the ideal and the actual practice. Such a disparity reflects a lack of competence in the mentor while creating confusion in the mentee's learning (Cheong et al., 2020). These findings show that mentoring can be challenging when executed in developing countries. Another peculiar challenge for this context was a lack of mentoring guidelines and standards. The unstandardised nature of mentoring meant each mentoring session was unique, and each mentee received and experienced mentoring that varied based on the mentor's personality, competencies, and mentoring style. Unstandardised mentoring has implications for the outcomes.

The Egg white

The egg white in the framework represents the context of mentoring. Each individual brings personal beliefs and values to a mentoring relationship that influence their relational context. Beliefs and values regarding mentoring are based on perceptions that mentors are born hence mentoring as a natural role in nursing and midwifery versus the perception that mentors can

be nurtured and their skills and competencies developed. Secondly, the perceived need for mentoring, that is, individuals engage in mentoring for personal, professional, or organisational reasons. The relational context of mentoring is also based on the subtle rules that govern the mentoring relationship—for example, relationships governed by reciprocity, trust, and respect. Plus, the implicit rules of exchange between the mentor and mentee and between the clinician and the organisation are characterised by the clinician internally evaluating the benefits and consequences of engaging in mentoring relationships. Another essential aspect of the relational context is the cultural meaning of trust and respect and how the mentor and mentee demonstrate it. Any beliefs and perceptions on relational mentoring have implications for the quality of the relationship and outcome of mentoring programs.

The egg white also consists of the organisation context of mentoring that focus on standards, guidelines, and overall culture of mentoring. Standardising mentoring involves specifying the goals and objectives for the mentoring programs, clarifying roles and responsibilities, prescribing the mentoring regimen that includes defining the amount, intensity, and duration of mentoring (Schwerdtle et al., 2017; Zhang et al., 2019) setting mentoring standards and guidelines that promote compliance among nurses and midwives. Mentor/mentee training is crucial for most programs. Training that emphasises how to mentor and how to handle prejudices, stereotypes, and biases towards others within the mentor-mentee dyadic members (Henry-Noel et al., 2019; Tuomikoski et al., 2020). Careful selection of mentors and mentees based on stakeholders' agreed-upon selection criteria is much needed to avoid mismatching of the mentor and mentee and eliminate racial and gender biases. One of the crucial challenges highlighted in this study was a lack of representation of the nursing and midwifery fraternity in high-level organisation management. Lack of representation defeats the essence of relational learning (Schwerdtle et al., 2017); in other words, there are not enough role models to look up to. Furthermore, a lack of representation meant issues pertinent to the development of the profession will not be addressed with the utmost urgency and concern that they deserve.

The Egg Yolk

The premise of contextual mentoring is that mentor, mentee, and organisation interact actively within the egg yolk. This interaction emphasises that the active participation of all stakeholders characterises it. Each stakeholder has roles, responsibilities, and outcomes in a mentoring relationship. This differs from traditional mentoring models in which the mentor is

an active giver, the mentee is a passive receiver of mentoring activities, and the organisation is the silent observer (Jacobs, 2018).

The findings of this study have implications for future mentoring programs constituting what this study calls ‘the mentoring egg’. The present study shows that informal mentoring experiences have the potential for high-quality mentoring relationships and hence outcomes. Therefore, adapting informal mentoring principles may overcome some disadvantages reported in formal mentoring, such as a lack of resources to support mentoring (Henry-Noel et al., 2019; Janssen et al., 2016). The principles of informal mentoring leverage the internal motivations of mentors, addressing their drive to mentor, as well as the organisational and professional necessity for mentoring. Envisioning future formal mentoring programs for the nurses and midwives working in hospitals in Uganda calls for acknowledging the critical stakeholders, the context in which they deliver care to patients, and the need for building mentorship in the workforce for improved care outcomes for clients receiving hospital care (Wissemann et al., 2022). Therefore, the nurses/midwives and the organisation form the yolk of the mentoring egg. These stakeholders relate and function in the organisation and interpersonal context that form the egg white. The shell of the mentoring egg is held together by the internal and external opportunities within the individuals, the organisation, and the health care system that keep the mentoring effective. Challenges within and outside the organisations that affect effective mentoring can crack open the mentoring egg and damage the required mentoring structures, therefore, affecting the effectiveness of mentoring relationships and programs, as shown in Figure 12.1.

11.7 Limitations and implications for future research

Although this study employed a mixed-methods approach, combining both quantitative and qualitative methods to leverage their respective strengths, it still faced certain limitations. The complexity of mentoring itself posed challenges for the study. Mentors often have multiple mentees, and mentees may be engaged in multiple mentoring relationships concurrently. Additionally, brief mentoring episodes may qualify as mentoring activities without meeting the criteria of a long-term mentoring relationship. Moreover, there are instances of senior clinicians serving as inspirational role models for good nursing/midwifery practices without consciously realising that they are engaging in mentoring. As a result, findings from mentoring studies cannot be limited to a single unique relationship, episode, or activity, as mentoring is multifaceted and intricate in nature. The study also encountered limitations in

the use of online data collection methods during the quantitative phase. Online surveys are susceptible to sampling bias (Newman et al., 2021), as they primarily reach individuals with specific demographic characteristics, particularly those with internet access and the required technology, such as smartphones or computers.

Furthermore, although key mentoring dimensions were identified, and their mechanisms were described through meta-inferences drawn from both datasets, certain aspects of mentoring, particularly related to career and turnover intentions, were not fully explored due to unavailable data in the qualitative findings. The study proposes a contextual framework for mentoring that can be adapted for both informal and formal mentoring settings. Future research can further evaluate and expand upon this framework to encompass a broader context of mentoring, addressing the identified limitations and enriching our understanding of mentoring practices.

11.8 Chapter Summary

This chapter has discussed the core findings of this study considering current literature. The study shows that the mentee, mentor and organisation have set roles and responsibilities in mentoring. The organisation has a crucial role in mentoring as it directly impacts the outcomes of mentoring. The view of mentoring within pragmatic paradigm requires paying attention to the context of mentoring. Therefore, this study builds a contextual model of mentoring that has potential for use in informal mentoring relationship and formal mentoring programs.

CHAPTER 12: CONCLUSION AND IMPLICATIONS FOR PRACTICE

12.1 Chapter Introduction

This chapter provides an in-depth characterisation of mentoring practices among nurses and midwives in Ugandan hospitals. The study adopts a mixed methods approach, conducting research in two distinct phases. Initially, an integrative literature review was conducted, synthesising existing findings on mentoring to identify its benefits and challenges. To align with current methodologies and the latest literature on mentoring, an updated review was also performed. However, both the original and updated reviews revealed a significant gap in representing mentoring in a context consistent with Uganda. To bridge this gap, a sequential explanatory design was employed for the study. Chapters six and seven outline the methods and results of phase one, while chapters eight, nine, and ten delve into the methods and findings of the qualitative phase. Chapter eleven presents meta-inferences arising from the integrated findings, providing a comprehensive overview of the study's outcomes.

This research offers three main contributions. Firstly, it provides a foundational understanding of mentoring for nurses and midwives in Ugandan hospitals, serving as baseline data for future advancements in mentoring research and practice, as well as the development of formal mentoring programs. Secondly, the study contributes to the literature on informal mentoring, which, despite being prevalent, remains understudied. Lastly, it proposes a contextual framework for mentoring, offering potential applicability in both formal and informal mentoring settings. The subsequent sections present a summary of the entire study and outline its implications for practice and policy.

12.2 Summary of the study

This study used the sequential explanatory mixed methods design to evaluate mentoring for hospital nurses and midwives in hospitals in Uganda. The study was informed by Dewey's pragmatism that emphasises the importance of context when studying physical phenomenon. Three theories provided basis of this study: social exchange theory, perceived organisation support theory and self-efficacy theory. The study was conducted in two phases: the quantitative and qualitative phase. Both the quantitative and qualitative phases were of equal emphasis in this study. Integration in this study was achieved at three levels. First, by connecting the quantitative results to the design and sampling of qualitative phase. The sample of nurses and midwives in the qualitative phase was drawn using maximum variation sampling based on the contextual setting, professional experience, gender, qualification, and type of professional registration. Second, in a staged approach in which each quantitative and qualitative datasets was analysed and presented separately in the thesis and finally in-drawing meta-inferences from both datasets.

The quantitative phase used a cross-sectional design to collect data from 303 nurses and midwives working in Ugandan hospitals. Data was collected via Qualtrics and analysed in SPSS version 27 and Hayes PROCESS macro was also used. The second phase used the qualitative descriptive design to explore perceptions and experiences of nurses and midwives working three hospitals in Uganda. Data was collected using semi-structured interviews with 35 nurses and midwives. The interviews were audio recorded and later transcribed. Data was analysed using reflective thematic analysis and nine overarching themes arose from the data: *beliefs about mentoring, the need for mentoring, development of mentoring relationship, the mentoring process, positive experience realised from mentoring, Mentoring can be bad, obstacles to mentoring and opportunities for mentoring in the workplace.*

Meta-inferences were drawn from both the qualitative and quantitative datasets in attempt to explore the mentoring dimensions among the nurses and midwives working in hospitals in Uganda. Integrating the findings showed qualitative findings explained the quantitative results by expounding on the informal nature of mentoring, the *individual influences* in mentoring relationships and participants willingness to participate in future formal mentoring programs. Qualitative findings confirmed quantitative results for all the mentoring dimensions related to negative mentoring experiences and perceptions that is, *lack of mentor expertise, mismatch between the dyad, risk to reputation, nepotism, and mentoring effort.*

Integrated finding reporting on the *relational quality* in mentoring were discordant while findings exploring the impact of mentoring experiences on career and turnover intentions of nurses and midwives remained inclusive.

12.3 The suggested mentoring framework: THE MENTORING EGG

Based on the study findings, the researcher uses the mentoring egg as a metaphor to describe the required structure to foster the benefits of mentoring in the context of nurses and midwives working in hospitals. The mentoring structure is based on integrated findings from this study and supported by existing theories and literature. The structure shows the reciprocal interaction of mentor, mentee, and organisation, forming the egg yolk. This egg yolk floats in the egg white, which is the immediate context of mentoring informed by the organisation culture that supports mentoring, personal beliefs about mentoring, and the perceived need for mentoring. The eggshell is kept intact by mentoring opportunities present within the organisation and among the nursing and midwifery workforce—any challenges to mentoring risk cracking open the mentoring egg. Mentoring efforts should be aimed at these challenges to keep the mentoring egg intact.

12.4 Implications of the study for practice and policy

The use of mixed methods design allowed for holistic exploration of mentoring beyond the few mentoring activities i.e., clinical supervision and preceptorship reported in literature for developing countries. Therefore, the findings in this study have implications for nursing research and policy.

Implications for practice

The study brings attention to significant nursing professional issues that hold implications for future mentoring endeavours. Notably, nurses and midwives with diploma/certificate qualifications and more than 5 years of experience are more likely to perceive mentoring as costly. Given that this group forms the majority of the nursing/midwifery workforce in Uganda, it becomes imperative to address this perception. To motivate them to mentor others, institutional rewards can be directed towards this group of clinicians. Additionally, providing mentor training to this cohort can raise awareness about the benefits of mentoring and receiving mentoring in clinical practice.

The study also underscores the potential for better quality mentoring relationships within informal mentoring structures. Incorporating the attributes observed in informal mentoring into the design and organisation of formal mentoring programs holds potential to enhance the overall experience and outcomes of mentoring. Moreover, the study reveals that clinicians prioritise fostering meaningful mentoring experiences over specific mentoring activities. The quality of the mentoring relationship, characterized by trust and respect, takes precedence over activities like teaching, coaching, or sponsoring. The notion of mutuality in the relationship and the fluidity of roles and responsibilities are highlighted by the clinicians. Future programs and relationships should be built on principles of reciprocity, focusing on empowering clinicians with relational skills, such as communication, conflict resolution, and resilience.

Organisational support is shown to have significant implications for mentoring outcomes within the workplace. Commitment from the organisation to mentoring involves strategic establishment, coordination, and instrumental rewards. This can be demonstrated through explicit standards and guidelines and fostering a culture of mentoring that supports the professional development of clinicians. Nurses and midwives also evaluate the benefits, costs, and alternatives to mentoring internally. To support mentoring, organisations should emphasise the benefits of mentoring and work to address the challenges associated with it. Additionally, considering the mechanisms of negotiated exchange orientation, perceived organisational support, and self-efficacy can aid in understanding the outcomes of mentoring. By taking these factors into account, organisations can foster an environment that promotes effective and meaningful mentoring relationships, benefiting both the mentors and mentees.

Implications for policy

This study underscores the importance of standardising mentoring practices among nurses and midwives in hospital settings. To achieve this, explicit policy guidelines related to mentoring as a professional development approach should be incorporated into organisational frameworks. By including mentoring in policy frameworks, organisations can demonstrate their commitment to mentoring through adequate funding and support.

Standardisation of mentoring also involves the establishment of clear performance indicators (KPIs) and their evaluation using contextually validated tools. The study highlights the use of culturally adapted and validated mentoring scales specific to Uganda's hospital settings. For

instance, the relational mentoring index scale, which emphasises the reciprocal relationship between mentees and mentors, can serve as a valuable KPI in mentoring programs.

Incorporating policy changes to include explicit expectations for nurses and midwives to engage in mentoring is crucial. One effective mechanism outlined in this study is attaching Continuous Professional Development (CPD) points to mentoring activities. This approach can incentivize and encourage greater participation in mentoring. Moreover, offering CPD activities such as mentoring webinars can raise awareness about mentoring among healthcare professionals. Utilising summarized mentoring literature in the form of booklets and posters can also serve as valuable resources to support mentoring efforts.

Furthermore, fostering international collaborations and engaging with international organisations can provide avenues for funding and offer opportunities for mentoring with nurses and midwives from diverse qualifications and skill sets. Such international interactions can enrich the mentoring experience, enabling professionals to gain insights from a broader range of perspectives.

Overall, standardising mentoring practices and integrating mentoring into organisational policies are critical steps towards promoting professional development and enhancing the quality of mentoring relationships among nurses and midwives in hospital settings.

12.5 Chapter summary

The study's main aim was to characterise mentoring for nurses and midwives working in Ugandan hospitals. This mixed methods study has identified both positive and negative mentoring experiences and perceptions that have implications for future mentoring. The current study has also provided a contextual mentoring framework that can be adapted for both formal and informal mentoring in hospital settings. This study highlights implications for practice research and policy in addressing the continued need for mentoring among nurses and midwives working in hospital settings.

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Appendices

Appendix 1: Example of the Search strategy

CINAHL: EBSCOhost research databases		
Advanced search		
Limiters: None		
S27	S4 AND S11 AND S18 AND S26	748
S26	S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25	208,148
S25	"career development"	15,729
S24	("intention to leave" or "turnover intention" or "leaving intention") OR ("intent to stay" or "intention to stay") OR "job embeddedness" OR turnover OR commitment	36,885
S23	"intention to leave or turnover intention or leaving intention"	0
S22	recruit*	133,284
S21	(MH "Personnel Recruitment")	12,075
S20	retention	36,574
S19	(MH "Personnel Retention")	9,117
S18	S12 OR S13 OR S14 OR S15 OR S16 OR S17	32,526
S17	"clinical supervis*"	5,379
S16	precept*	6,520
S15	(MH "Preceptorship")	4,555
S14	mentor*	21,883
S13	(MH "Mentorship") OR (MH "Clinical Supervision")	18,980
S12	(MM "Mentorship") OR (MM "Clinical Supervision")	9,064
S11	S5 OR S6 OR S7 OR S8 OR S9 OR S10	807,071
S10	"acute care facilit*"	861

S9	(MM "Acute Care") OR (MH "Acute Care Nurse Practitioners")	5,021
S8	"healthcare facilit**"	2,945
S7	(MH "Health Facilities+")	461,340
S6	hospital*	544,030
S5	(MH "Hospitals+") OR (MH "Hospitals, Public+") OR (MM "Hospitals, Pediatric") OR (MM "Hospitals, Veterans") OR (MM "Hospitals, Military") OR (MM "Hospitals, Psychiatric") OR (MM "Hospitals, Community") OR (MM "Hospitals, Special") OR (MM "Hospitals, Urban") OR (MM "Hospitals, Rural") OR (MH "Hospitals, Private") OR (MM "Magnet Hospitals") OR (MH "Hospitals, Federal+")	116,689
S4	S1 OR S2 OR S3	880,548
S3	nurs*	876,362
S2	(MH "Nurses+") OR (MM "Practical Nurses")	224,655
S1	(MM "Practical Nurses") OR (MM "OB-GYN Nurse Practitioners") OR (MM "Nurse Administrators") OR (MM "Emergency Nurse Practitioners")	8,292

Appendix 2: Critical appraisal of the studies.

Yes = Y No = N; ?= unclear, not applicable=NA

Critical appraisal for analytical cross-sectional studies

Authors of the studies	Questions								Total
	Were the criteria for inclusion in the sample clearly defined?	Were the study subjects and the setting described in detail?	Was the exposure measured in a valid and reliable way?	Were objective, standard criteria used for measurement of the condition?	Were confounding factors identified?	Were strategies to deal with confounding factors stated?	Were the outcomes measured in a valid and reliable way?	Was appropriate statistical analysis used?	
Adeniran et al. 2013	Y	Y	Y	Y	Y	N	Y	Y	7
Fleig-Palmer et al 2015	Y	Y	Y	Y	Y	Y	Y	Y	8
Huang et al 2012	Y	Y	Y	Y	Y	Y	Y	Y	8
Jakubik et al. 2011	Y	Y	Y	Y	Y	?	Y	Y	7
Jakubik, 2008	Y	Y	Y	Y	Y	?	Y	Y	7
Mariani 2012	Y	Y	Y	Y	N	N	Y	Y	6
Pham et al. 2019	Y	Y	Y	Y	Y	Y	Y	Y	8
Weese, et al. 2015	Y	Y	Y	Y	Y	N	Y	Y	7
Weng et al. 2010	Y	Y	Y	Y	Y	Y	Y	Y	8

Adapted from Joanna Briggs Institute Critical Appraisal Tools (JBI 2020), <https://joannabriggs.org/critical-appraisal-tools>

Critical appraisal for quasi experimental studies

Authors of the studies	Questions									TOTAL
	Is it clear in the study what is the 'cause' and what is the 'effect'	Were the participants included in any comparisons similar?	Were the participants included in any comparisons receiving similar treatment/care, other than the exposure or intervention of interest?	Was there a control group?	Were there multiple measurements of the outcome both pre and post the intervention/exposure?	Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?	Were the outcomes of participants included in any comparisons measured in the same way?	Were outcomes measured in a reliable way?	Was appropriate statistical analysis used?	
Latham, C. L., et al. (2011) ¹	Y	N	NA	N	Y	Y	NA	Y	Y	5
Rudin et al (2018)	Y	?	?	N	N	?	?	Y	N	2
Schroyer et al. 2020	Y	Y	Y	Y	Y	Y	Y	Y	Y	9
Witter et al. 2013	Y	Y	Y	Y	Y	Y	Y	Y	Y	9
Zhang et al. 2019	Y	Y	Y	Y	Y	Y	Y	Y	Y	9

Adapted from Joanna Briggs Institute Critical Appraisal Tools (JBI 2020), <https://joannabriggs.org/critical-appraisal-tools>

Critical appraisal for qualitative studies

Author and date	Questions										Total
	Is there congruity between the stated philosophical perspective and the research methodology?	Is there congruity between the research methodology and the research question or objectives?	Is there congruity between the research methodology and the methods used to collect data?	Is there congruity between the research methodology and the representation and analysis of data?	Is there congruity between the research methodology and the interpretation of results?	Is there a statement locating the researcher culturally or theoretically?	Is the influence of the researcher on the research, and vice- versa, addressed?	Are participants, and their voices, adequately represented?	Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	
Angelini (1995)	Y	Y	Y	N	Y	N	N	?	Y	Y	6
Devey et al 2020	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10
Latham, et al. (2011) ¹	?	Y	Y	Y	Y	N	N	Y	Y	Y	7
Merga et al. (2020)	Y	Y	Y	Y	Y	Y	Y	Y	?	Y	9
Pop (2017)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	9
Rohatinsky, et al (2016)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	8
Rohatinsky, et al (2018)	?	Y	Y	y	Y	N	N	Y	Y	Y	7
Ronsten, et al 2005	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10
Woolnough et al. (2006)	?	Y	Y	Y	Y	N	Y	Y	Y	Y	8
Woolnough et al. (2014)	?	Y	Y	Y	Y	N	Y	Y	Y	Y	8

Adapted from Joanna Briggs Institute Critical Appraisal Tools (JBI 2020), <https://joannabriggs.org/critical-appraisal-tools>

¹ Study used mixed methods design

Appendix 3: Summary of studies included in the review.

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
1.	Adeniran et al. 2013 USA	To determine differences between Internationally Educated Nurses (IEN) and US Educated Nurses (UEN) in their levels of mentoring functions, self-efficacy and professional development and career advancement	Cross-sectional design Registered nurses with ≥ 3yrs of experience Mean age range 41-42.4 years. 80% females IEN group 91% females in UEN group Hospital	The 15-item multidimensional mentoring Instrument Measuring the career, psychosocial and role modelling functions of mentoring (1 – 5 <i>likert scale</i> , ↑ better) Mentor characteristics: gender, ethnicity, and position at work.	Professional development: (1) continued education credits/year; (2) received formal degree since last education; (3) pursuing academic degree; (4) professional certification Career advancement: (1) promotions received during their career; (2) practice role.	<ul style="list-style-type: none"> The level of mentoring and role modelling was significantly different ($p = .02$): IENs were less likely to look up to their mentors as role models. Significant difference between groups for mentor's position and race. Not significant for mentor's sex Significant difference between groups for professional development: UEN showed better professional development Career development: Significant difference between groups for practice role (IENs were most likely to be staff nurses) and less likely to receive a promotion through career ladder.
2.	Angelini (1995), USA	To identify perceived mentoring experiences of staff nurses working in teaching and non-teaching hospitals. To describe mentoring strategies and career development as viewed by staff nurses.	Grounded theory Face-to-face Interviews, Document analysis 37 female staff nurses	Interview guide not attached	N/A	Developed a structural model showing that mentoring for career development is influenced by environment, people, and events Environment Consisted of barriers, non-barriers, expectations, and rewards Barrier; included value conflicts, limited advancement and recognition

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
		To develop models that depict mentoring and emergent variables.	<p>8 female nurse managers</p> <p>Mean age 38.2years</p> <p>Setting: 4 acute care hospitals</p>			<p>opportunities, lack of support at the unit level, and unsafe work conditions</p> <p>non-barriers: employee recognition programs, nursing judgments being valued, nurses viewed as key players in the health care system, and job opportunities beyond the unit level</p> <p>Expectations: educational opportunities, support for career changes and transitions, and flexible scheduling to accommodate the continuing education needs of staff</p> <p>Rewards: financial rewards and psychic rewards such as feeling satisfied with their care to patients and families, as well as working with competent people at the unit level and having a chance to serve as a consultant to other nurses</p> <p>People</p> <p>These were primary influential such as peers and nurse managers and secondary influential for example family members, clinical nurse specialist, physicians, clinical nurse educators</p> <p>Events this category had three subcategories: career incidents, clinical</p>

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
						<p>patient situations, and socio-political-cultural circumstances</p> <p>Career development outcomes included:</p> <p>positive interaction in the organisation climate, building career relationships and facilitating transition</p>
3.	Devey et al (2020), Canada	To explore mentorship pairing practices occurring between new graduate nurses and more experienced nurses in a mentoring role within a clinical setting	<p>Qualitative interpretive descriptive study</p> <p>New nursing graduates (n=13), mentors (n=12), and nurse leaders (n=6)</p> <p>Age range between 25 and 42 years 27 females, 4 males</p> <p>Acute care academic health facilities</p>	<p>For new graduates, the interview guide had questions focused on the pairing process, their experiences with the pairing processes and their thoughts regarding future pairing processes.</p> <p>The clinical manager and nurse educator interview guides had questions focused on the pairing processes they use in their practice to pair new</p>	N/A	<ul style="list-style-type: none"> • Mentors and mentees were not sure of the pairing process • Pairing was done by the nurse leaders • Mentors were either asked or they volunteered to mentor • Initial connection with between the mentor and mentee occurred via a text, or following a shift together • Sometimes they were lucky that the personalities of the mentor and mentee clicked. • If the pair didn't match, subtle changes to pairings were made by the nurse leaders • Organisational facilitators of the pairing included: resources such as learning plans, check-ins/follow-up, and educational workshops. Mentees having had their final placement on the unit where they were hired. • Organisational barriers to pairing included work schedule and workloads.

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
				graduate nurses with mentors.		
4.	Fleig-Palmer et al. (2015), USA	To examine the impact of interpersonal mentoring on affective organizational commitment and the potential moderating effect of affective commitment in the knowledge transfer-retention relationship.	<p>Survey Questionnaire</p> <p>Sample size=159</p> <p>Participants: individuals providing direct patient care</p> <p>92% female Ages ranges 19-74years</p> <p>Settings acute care hospital and clinics</p>	<p>The 15-item Mentor Role Instrument. Measuring counselling, role modelling, protection, acceptance and confirmation, and friendship functions of mentoring (1 – 5 <i>likert scale</i>, ↑ better)</p>	<p>Affective commitment Measured with 8-item Organizational Commitment Questionnaire (1 – 5 <i>likert scale</i>, ↑ better)</p> <p>Retention Measured using one-item asking participants to indicate probability of leaving the organisation in the next year on 0-100 scale (↓ <i>better</i>)</p>	<ul style="list-style-type: none"> • Interpersonal mentoring explained 35% of the variance in affective commitment. • There was an inverse relationship between knowledge transfer and retention. • The level of affective commitment influenced the relationship between knowledge transfer and turnover intentions such that those health care workers who reported greater levels of knowledge transfer were more likely to be considering leaving the organization when affective commitment was low
5.	Huang et al. (2012), Taiwan	To examine the effects of interpersonal attraction, self-efficacy on relationship effectiveness (RE) respectively, to test mentoring function as a mediator, and to verify the	<p>Survey Questionnaires</p> <p>Sample size =306</p> <p>Participants: new staff nurses (mentees)</p>	<p>9-item mentoring function scale measuring psychological support, career development and role</p>	<p>6-item Organisational commitment scale measuring value, effort and staff commitment (1 – 5 <i>likert scale</i>, ↑ better)</p>	<p>Positive significant relationship between interpersonal attraction and mentoring function (P<0.05)</p> <p>Positive significant relationship between relationship effectiveness and mentoring function (P<0.05)</p>

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
		effect of RE on protégé work outcomes (organisational commitment)	Mean age 26.8years Gender not reported. Hospitals	modelling mentoring behaviours (1 – 5 <i>likert scale</i> , ↑ better)		Positive significant relationship between relationship effectiveness and organisation commitment ($P < 0.05$) Non-significant relationship between self-efficacy and relationship effectiveness plus self-efficacy and mentoring functions
6.	Jakubik, (2008), USA	To explore the relationships among quality, quantity, and type of mentoring and mentoring benefits for Pediatric staff nurse protégés	Descriptive correlational Sample size = 214 Participants: pediatric staff nurses (protégé) Mean age 46 years. 97.2% females Settings: acute, hospital or clinic settings	Quality of mentoring 14-item Caine Quality of Mentoring Questionnaire measuring the following mentoring functions: model, envisioner, energizer, investor, supporter, standard-prodder, teacher-coach, feedback-giver, eye-opener, door-opener, idea-bouncer, problem-solver, career counselor, and challenger. (1 – 5 <i>likert scale</i> , ↑ better)	Mentoring benefits measured with 57-item Jakubik Mentoring Benefits Questionnaire (1 – 5 <i>likert scale</i> , ↑ better).	<ul style="list-style-type: none"> • Intention to stay in the unit for at least one year 52.3% • Intention to stay in the organisation in at least 1yr 60.6% • Mean score on the Jakubik MBQ was 228.60 (38.34). copy from suppl table 6 • Quality of mentoring explained 54.76% of the variance in mentoring benefits for the mentee ($p < 0.001$) • Quantity of mentoring explained 13.69% of the variance in mentoring benefits for the mentee ($p < 0.001$) • Type mentoring explained 1% of the variance in mentoring benefits for the mentee. This was not significant.

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
				<p>Quantity of mentoring which measured the frequency of meeting the mentoring functions. Responses were daily, weekly, monthly, or never.</p> <p>Type of mentoring measured by respondents indicating whether mentoring was formal workplace sponsored, formal non-workplace sponsored, informal, or both formal and informal</p>		
7.	Jakubik et al. (2011), USA	To explore the predictors of mentoring benefits among experienced pediatric staff nurse protégés in a single freestanding Midwestern children's hospital	<p>Descriptive, correlational design</p> <p>Sample size=138</p> <p>Mean age 38 years,</p>	<p>Quality of mentoring 14-item Caine Quality of Mentoring Questionnaire (1 – 5 <i>likert scale</i>, ↑ better)</p>	<p>Mentoring benefits measured with 57-item Jakubik Mentoring Benefits Questionnaire (1 – 5 <i>likert scale</i>, ↑ better).</p>	<ul style="list-style-type: none"> Quality of mentoring explained 37.21% of the variance in the mentoring benefits for the mentees ($P < 0.01$). The relationship between Quantity along with type of mentoring and benefits of mentoring was not significant.

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
			<p>98% females</p> <p>Participants: experienced pediatric Nurses (protégé)</p>	<p>Quantity of mentoring which measured the frequency of meeting the mentoring functions. Responses were daily, weekly, monthly, or never.</p> <p>Type of mentoring measured by respondents indicating whether mentoring was formal workplace sponsored, formal non-workplace sponsored, informal, or both formal and informal</p>		<ul style="list-style-type: none"> Most of the respondents stated that they did not intend to leave the organization (58%). In addition, 13% of nurses stated they intended to stay longer than 5 years, and 15% of nurses stated they intended to stay 2–5 years.
8.	Latham et al. (2011), USA	To evaluate the effect of university-service partnership mentorship and shared governance program on nurse perceptions of the supportive culture of the	<p>A quasi-experimental, non-control group design</p> <p>Presented both qualitative and quantitative findings.</p>	Mentoring program	Retention rates defined as the total number of RN separations divided by 1 minus total number of RN employees	<p>Similar personalities and learning style traits did not correlate among paired mentor–mentee team members.</p> <p>One of the hospitals improved their RN retention rate by 21% over the 3-year period (from a baseline of 76% to a 91.72% retention; $F = 2.94$, $p = .03$).</p>

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
		workplace environment, professional skill development, decisional involvement, and retention and vacancy rates	N=105 mentor– mentee teams i.e., 89 mentors and 109 mentees Mentee mean age 33 years. Mentors means age 41 years. Acute care facilities		Vacancy rates defined as the number of open requisitions divided by the number of open requisitions and currently employed RNs;	The second hospital decreased vacancy rates for RNs by 80% over 4 years (baseline 21.35 decreased to 4.28 open RN requisitions; $F = -2.841$, $p = .03$).
9.	Mariani, (2012), USA	To explore the influence of participation in a mentoring relationship on career satisfaction and on intent to stay in nursing, and the relationship between career satisfaction and intent to stay in nursing	a descriptive comparative and correlational design Survey Sample size mentored 173 not mentored 37 86.7% females Mean age 41.2 years	Mentoring relationship Yes/No Role in mentoring	Intention to stay in nursing profession measured by number of years (\uparrow better). Career satisfaction	<ul style="list-style-type: none"> The mean number of years for intent to stay ($n = 167$) was 18.51 years ($SD = 8.38$) The mean number of years for intent to stay ($n = 167$) was 18.51 years ($SD = 8.38$). There was no statistically significant difference in the number of years nurses intended to stay for those who did and those that did not participate in a mentoring relationship ($P=0.42$) No significant difference between in career satisfaction for nurses in a mentoring relationship and those that were not in a mentoring relationship ($p=0.42$)

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
			participants were registered nurses employed in the practice, education, administration, or research setting			
10.	Merga et al (2020), Australia	To examine nurse managers' perceptions of barriers to the mentoring of early career nurses	<p>Grounded theory</p> <p>semi-structured interview</p> <p>purposive sampling</p> <p>20 nurse managers 16 females.</p> <p>Majority (n=11) between 40 to 49years</p> <p>public and private hospitals</p>	<p>Participants were asked are their barriers to (intergenerational) mentoring in your workplace?</p> <ul style="list-style-type: none"> • If yes, please provide examples. • If no, why do you think this is the case? 	N/A	<p>Three themes represented the barriers to mentoring of early career nurses.</p> <ul style="list-style-type: none"> • Interpersonal conflict: these included generational differences, communicative competency, perceived challenging personalities and attitudes. • Competing priorities for time and financial resources • Lack of training: lack of training on mentoring, and on how to address challenges that arise during mentoring
11.	Pham et al. (2019),	To examine the impacts of mentor–mentee rapport on	Cross-sectional design	3-item willingness to mentor/Willingness to	3-item professional turnover intention	<ul style="list-style-type: none"> • Positive significant relationship between rapport and willingness to mentor/to be mentored ($p<0.05$)

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
	Taiwan	willingness to mentor/be mentored, self-efficacy, outcome expectations, career interest and subsequently on nurses' professional turnover intention.	Survey N=166 (84 mentors and 82 mentees 97.6% females 84.2% less than 40 years old Medical centre	be mentored Questionnaire 3- items measuring rapport adapted from (1 – 7 <i>likert scale</i> , ↑ better)	measuring short-term, mid-term and long-term intentions	<ul style="list-style-type: none"> • Willingness to be mentored positively related to self-efficacy ($p<0.05$) • Self-efficacy positively related to outcomes expectations ($p<0.05$) • outcomes expectations positively related to career interest ($p<0.05$) • career interest negatively related to intentions to leave the profession ($p<0.05$)
12.	Pop (2017), USA	To develop a theory of mentoring for new Nurse Practitioners in a hospital setting	Grounded theory Semi-structured interviews Purposive and theoretical sampling 8 mentors (nurse practitioners) 8 mentees (new nurse practitioners) Mentees below 30years	The overview question queried participants about the meaning of mentoring. Follow-up questions inquired about actual events and experiences, both positive and negative, as well as perceived benefits and barriers. The number of follow-up questions varied	N/A	<p>A three-phase theory of mentoring emerged from the data:</p> <ul style="list-style-type: none"> • Forming the relationship: this includes mentoring participants getting to know each other and identifying mentee's needs • Developing the relationship: this was the longest phase that sometimes went beyond the time frame of a formal mentoring program <ul style="list-style-type: none"> ○ The journey, participants described mentoring as a journey to know each other, to transition, to find time and meet and to deal with various issues. ○ Define their career path ○ Balance work and life ○ Develop network

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
			Most mentors above 50years Pediatric, university affiliated hospital	based on the complexity and depth of the answer to the overview question. Additional questions were often used to learn more about specific instances or events		<ul style="list-style-type: none"> ○ Define their Role through building confidence, negotiating relationships and developing independence in clinical practice ○ Mentoring as a mutual relationship that had benefits for both the mentor and mentee. • Mentoring outcomes: this phase included personal and professional satisfaction, role transition for the mentee, growth both mentors and mentee as they became more knowledgeable and more confident, and gaining a friend
13.	Rohatinsky et al (2016), Canada	To explore (i) employee perceptions of mentorship in rural healthcare organizations, (ii) the processes involved in creating mentoring relationships in rural healthcare organizations, and (iii) the organizational features supporting and inhibiting mentorship in	semi-structured interviews 7 RNs or LPNs Rural facility that provides acute, respite, and longterm care	The interviews focused on exploring and gaining an understanding of participants' perceptions of mentorship in rural communities using open ended interview questions that addressed the study objectives. Follow-up	N/A	<ul style="list-style-type: none"> • The new nurse in the rural facility found multiples responsibilities intimidating • Working conditions made recruitment difficult • Mentorship was integral to transition into rural healthcare facilities • Mentoring was seen as a tool to recruit new nurse • Mentoring was a form of support for new nurses in a complex facility • Three factors influenced transition of new nurses: <ul style="list-style-type: none"> ○ rural community influences for which the

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
		rural healthcare organizations		interviews were conducted when required to verify and confirm emerging concepts and relationships.		<p>rural environment was unique</p> <ul style="list-style-type: none"> ○ organizational influences: limited support system, limited staffing encouraged cohesiveness of the employees ○ mentorship program influences seen as essential for recruitment, transition and support of new staff. <ul style="list-style-type: none"> • Benefits of mentoring were reciprocal learning, build confidence and security for the new employee, progress the cycle of mentorship • Barriers included: limited opportunities for same profession mentoring, limited selection of available and willing mentors • Strategies included; mentor selection was crucial, personality matching, establishing trust, build awareness around mentorship
14.	Rohatinsky et al (2018), Canada	To understand the perceptions of Health Care Professionals and individuals in senior leaderships positions of same-profession mentorships in rural regions	<p>In-person or telephone interview snowball and purposeful sampling</p> <p>12 health care providers (RN, Nurse</p>	Interview questions focused on gaining an understanding of each participant's perceptions of mentorship in rural communities	N/A	<p>Two themes emerged from the data</p> <ul style="list-style-type: none"> • Challenges included <ul style="list-style-type: none"> ○ Administrative challenges included lack of support for mentorship from senior leaders, competing demands of practice, high staff turnover

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
		To determine how the factors and practices influence the development and sustainability of rural mentorships	practitioners, frontline, physician) 9 leaders Females n=17 Various age groups hospitals, clinics, and long-term care facilities			<ul style="list-style-type: none"> ○ Scope of practice challenges ○ Interpersonal and interprofessional challenges <p>Facilitators included using mentorship for recruitment and retention, openness, and commitment from both the mentor and mentee, formalised mentorship, community influence on mentorship</p>
15.	Ronsten et al (2005), Sweden	To elucidate mentorship of recently registered nurses' view of themselves with regard to their development of nursing competencies by means of the Sympathy-Acceptance-Understanding-Competence (SAUC) model for confirming mentorship	Questionnaires, personal interviews and focus group interviews 8 nurses (mentees) Females n=5 Mean age 38.6 years Hospital	Interview guide was not attached	N/A	<ul style="list-style-type: none"> • Mentees felt that mentors were genuinely willing to support them • Mentors guided nursing actions in clinical settings • Mentors created an environment that was free so the novices could freely express themselves • Mentors helped novices gain understand the implications of their actions • Mentors supported the novice individualisation at practice • Mentors supported novice's goals and capabilities
16.	Schroyer et al. (2020), USA	To calculate retention rates before and after implementation of a mentorship program	Quasi-experimental	Mentoring program	Retention rates	nurses assigned a mentor are retained at a higher rate ($\chi^2=6.873$, $p=0.009$).

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
			<p>N=70 (35 mentored and 35 not-mentored) registered nurses</p> <p>Mentors (n=18, mean age=37.7years, 29 females)</p> <p>Mentees (n=30, mean age = 27.5 years, 23 females)</p> <p>Setting: acute care hospital</p>			
17.	Weese et al. (2015), USA	To determine if mentoring practices predict mentoring benefits	<p>descriptive, correlational study using survey</p> <p>N=185 registered nurses</p> <p>Majority (29.6%) between 40-49 years</p> <p>96% females</p>	<p>36-item mentoring practices scale measuring the level welcoming, mapping the future, teaching, support, protection and equipping for leadership (1 – 5 likert scale, ↑ better)</p>	<p>36-item Mentoring Benefits Questionnaire (1-5 Likert scale, ↑ better).</p>	<ul style="list-style-type: none"> There was a significant relationship between mentoring practices and total mentoring benefits ($p = 0.01$). Mentoring practices explained 79% of the variation in mentoring benefits The mentoring benefits for the mentee included sense of belonging, career optimism, competence, professional growth, security on the job and readiness for leadership.

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
			Pediatric hospital			
18.	Weng et al. (2010), Taiwan	To examine the effects of the different mentoring functions on the work outcomes through a survey of new nurses in Taiwan	Survey Self-administered questionnaires N=306 nurses 98.4% females Mean age 26.83 years Hospitals	9-item mentoring function scale measuring career development, psychosocial support and role modelling functions (1 – 5 <i>likert scale</i> , ↑ better)	6-item Organisational commitment scale measuring value, effort and staff commitment (1 – 5 <i>likert scale</i> , ↑ better)	Mentoring functions, had impact of the career development function ($\beta = 0.28$) and the role modeling function ($\beta = 0.26$) on organizational commitment is significantly positive, but the coefficient of the psychosocial support function is not significant
19.	Witter et al. (2013), USA	To examine how novice medical surgical registered nurses, with and without mentoring, differ for their pre- and post-mentoring Assessment of Patients, Clinical Decision-Making, Cultural Competency, Commitment to Professional Nursing Standards, Positive	quasi-experimental study N=50 (25 mentored, 25 not mentored) Majority (56%) between the ages of 26-36 years 80% females	Mentoring program	6-item Clinical Learning Environment Scale used to measure willingness to remain in the nursing profession (1 – 6 <i>likert scale</i> , ↑ better)	The post-mentoring scores for nurses who received mentoring, significant differences were found for Willingness to Remain in the Nursing Profession, $t(24) = -0.800$, $p = 0.028$.

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
		Feelings about Nursing at this Hospital, and Willingness to Remain in the Nursing Profession	Hospital			
20.	Woolnough et al (2006), UK	To understand the experiences of executive and non-executive UK National Health Service (NHS) Trust directors and senior managers as mentors in a career development and mentoring programme for a cohort of 27 female mental health nurses	Telephone semi-structured interviews 24 Executive and non-executive board directors and senior managers as mentors of female mental health nurse mentee Participants 52% females National Health Service (NHS) mental health trusts	These questions were asked before the programs: Previous mentoring experiences Perceptions of mentoring (definitions, qualities of effective mentors and mentees) Reasons for becoming a mentor Perceived programme outcomes Following question were asked after the programs: perception of the glass ceiling,	N/A	The experiences of the mentors was summarised as the effect the mentoring programme had on the mentor; the impact is summarised as follows: increased understanding of the mentoring role, increased awareness of career barriers for female mental health nurses, improved ground-level insight in relation to nursing staff and the patients they care for, improved professional reputation, increased networks, new insights into organizational issues, personal enjoyment and fulfilment and desire to implement organizational change.

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
				<p>whether their definition of mentoring has changed</p> <p>the contribution of the mentee to their learning from the mentoring relationship?</p> <p>The impact of mentoring relationship had on their development.</p> <p>changes in working practice as a result of your mentoring relationship.</p> <p>impact of mentoring relationship Trust?</p> <p>Whether they would consider becoming a mentor again?</p>		
21.	Woolnough et al (2014), UK	To investigate the effects of a career development and mentoring programme on	Longitudinal, qualitative study	Mentoring program	N/A	<p>Themes arising from the data included:</p> <p>Career development outcomes</p> <ul style="list-style-type: none"> 15/27 participant the mentoring program secured promotions

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
		female mental health nurses' career and personal development compared to a matched comparison group	<p>Semi-structured telephone interviews</p> <p>Female mental health nurse participants engaged in ward or non-ward based management positions (mentee)</p> <p>27 enrolled in the mentoring program, 27 in the comparison group</p> <p>Mentees (Mean age 36 years)</p> <p>Comparison group (mean age 38)</p> <p>6 NHS mental health trusts</p>			<p>while only 7/27 had promotions at their workplaces</p> <ul style="list-style-type: none"> Some mentees enrolled in further studies, other started learning sets in their trusts There was increased leadership effectiveness reported by the mentees There was increased networking and visibility within the trust <p>Personal development outcomes:</p> <ul style="list-style-type: none"> Increased self-confidence and self esteem Sense of clarity regarding their career Sense of empowerment Increased commitment to patient care
22.	Zhang et al. (2019), China	To what extent is a one-on-one mentorship program better than a basic preceptorship in decreasing the turnover rate over time	Longitudinal, non-randomized control study	Mentoring program	Turnover rates	<ul style="list-style-type: none"> The 1-, 2- and 3-year turnover rates for the experimental group were 3.77%, 3.48%, and 8.11% compared to 14.07%, 9.36%, and 14.19% for the control group, respectively. For the matched pairs, the 1-year turnover rate of new graduate

No	Author Year and country	Aim/ Objective	Methodology methods Sample and Setting	Instruments used to measure mentoring	Instruments used to measure Outcome of mentoring	Main Findings
			<p>N=control 199 intervention group=239</p> <p>Control (mean age 23.1 years, 86.9% females)</p> <p>Experimental group (mean age 23.3 years, 84.9% females)</p> <p>Hospitals</p>			<p>nurses in the experimental group was significantly lower than that of the control group ($p < 0.05$), while the 2- and 3-year rates were not significantly different between the two groups ($p > 0.05$)</p>

Appendix 4: Themes from qualitative studies

Themes	Sub-themes	Direct quotes	Authors
The benefits of mentoring programs	The benefits for mentees	<i>"She [mentor] really kind of nailed it down; it's not like the whole world is crashing down. To me it was like everything is just terrible, but really it was just the job, it wasn't everything, just the work. So, she [mentor] kind of helped me focus on that. It was very, very good. She also gave me a lot of very good suggestions on what to do outside work" (Participant quote).</i>	Pop, 2017, p. 306
		<i>"All new registered nurses ought to have a mentor, both at work and at home I could anywhere telephone my mentor, it was a good feeling. Mentorship in itself allows one to be a beginner, one can ask stupid questions and need not to be afraid to lose face due to that" (Participant quote).</i>	Ronsten et al. 2005, p.317
		<i>"I think that every time I've been to a code blue situation, especially working on the cardiac floor (unit) has been a mentoring experience. Something different every time, different people running them . . . you try to improve with each one that you do, know more about what you are doing, know the drugs better that you're giving. Just try to make it run smoother each time At each one that comes, you remember the last one you went to before" (participant quote).</i>	Angelini, 1995, p.92
		<i>"These outcomes include positive interaction within the organizational climate, development of career-building relationships, and facilitation of career transition points" (author quote).</i>	Angelini, 1995, p.94
		<i>"Usually we started from patients, from cases, and gradually got round to my own thoughts and opinions.... It's when it's all go that it gets tough and you've got to act fast. When it's like that you haven't got time to be new" (participant quote).</i>	Ronsten et al. 2005, p.318

		<p><i>"Everybody ought to have a mentor. It gave you a wonderful sense of security having a mentor you could ring up, at work and also when you were at home in the evening if something came up – it was a good feeling" (Participant quote).</i></p>	Ronsten et al. 2005, p.316
		<p><i>"I can't say that my general motivation and commitment have increased but I do think I've acquired greater motivation to dare to be what I am, allow myself to be a beginner, through being able to stop and talk to the mentor and think out what was right for me. (Participant quote)</i></p> <p><i>I thought I was a unique person.... I've changed my mind, got a new understanding of my own experiences – yes, I certainly have, since I became a nurse.... My ability to judge myself – I'd say it was increased by the mentorship" (Participant quote).</i></p>	Ronsten et al. 2005, p.316
		<p><i>"Having a mentor made it a bit easier to cope with all the expectations I myself and others had regarding different projects in my new professional role and work situation" (Participant quote).</i></p>	Ronsten et al. 2005, p.318
		<p><i>"You sort of feel that right now this is the most important project in your professional role and it's this project you're going to give top priority and develop – you can tackle the other projects later, but right now this is what's most important to you and what you've got to do" (Participant quote).</i></p>	Ronsten et al. 2005, p.318
		<p><i>"One of the good things was that you got to know people during the mentorship period and made new contacts, which I think helps you to grow. Cooperation – that was where the mentor could help me to see my own role in it all and see what was up to me and what was not" (Participant quote).</i></p>	Ronsten et al. 2005, p.318

		<p><i>"Move forward and trust yourself, and become more independent"</i> (participant quote).</p>	Pop, 2017, p.305
		<p><i>"To really help me in my role and understand that I am not just a nurse practitioner, but also an educator"</i> (participant quote).</p>	Pop, 2017, p.305
		<p><i>"In some ways self-define or establish yourself, as it allows me to get someone's perspective outside of my team in things that I saw as part of my role that maybe my team may or may not see as important"</i> (participant quote).</p>	Pop, 2017, p.305
		<p><i>"She helped me find and define new boundaries to establish myself as a nurse practitioner"</i> (participant quote).</p>	Pop, 2017, p.306
		<p><i>"I was having some issues, maybe not issues, but some problems understanding what my role is and the differences between a nurse and a nurse practitioner as related to my role. She [mentor] helped me kind of tune in and helped me understand what I needed to focus on and what I needed to let go and that was very helpful"</i> (participant quote).</p>	Pop, 2017, p.307
		<p><i>"She [mentor] allowed me to become a nurse practitioner faster. My five-year plan was to become a trauma nurse practitioner. But that five-year plan happened in one year"</i> (participant quote).</p>	Pop, 2017, p.307
		<p><i>"eradicated the 'nurses eat their young mentality"</i> (participant quote).</p>	Latham et al. 2011, p.350-351
		<p><i>"...So you've got to decide what's needed and what's not – and then it's good to have a mentor. At first you focus on the technical side.... You explain how</i></p>	Ronsten et al. 2005, p.318

		<i>you did it all in the wrong order and not by the book and so on, even though it turned out all right anyway – that's what it's like when you're new.... You can find other ways of moving forward, but it's hard to explain how. It's made me stronger, trusting my own judgement"</i> (participant quote).	
		<i>"The programme's definitely made me more visible. I walk through the trust and people say hello to me that I never knew before. I also get invited to various meetings and things like that because people know my name and know I've been on the programme"</i> (Mentee, T2 Participant quote).	Woolnough et al. 2014, p.116
		<i>"I feel much more in control and less frustrated in my career. The programme's been a catalyst for me!"</i> (Mentee, T3 Participant quote).).	Woolnough et al. 2014, p.116 Woolnough et al. 2014, p.115
		<i>"Yes I've been promoted. Unexpectedly, a post came up and they asked if I would do the acting up post to give me some experience of operating in that role. I met with my mentor and he went through the job description with me and he said there is nothing on there that you can't do is there [...]? I had to agree there wasn't. So he sort of built my confidence up and gave me support through the acting up role and when the post came up he was very supportive that I went for it as well and I got the post"</i> (Mentee, T3 Participant quote).	Woolnough et al. 2014, p.115
		<i>"I've started a Masters in Advanced Practice. That was absolutely the direction I wanted to go in. I started off the course looking at my career outcomes. I wanted to have some kind of idea about my career path and look at appropriate education as part of that and link the two together which I'm in the process of doing now"</i> (Mentee, T3, Participant quote)..	
	The benefits for mentors	<i>"For me it [mentoring] is a mean to connecting with the younger generation or the younger employees. I get to know those people. I think that's a real benefit. I like to create bridges. So, it's a communication street"</i> (Participant quote).	Pop, 2017, p.306-307

		<i>"I don't think the programme has changed my views of mentoring. It's probably reconfirmed it. The mentoring relationship I've had with my mentee has been quite successful and I haven't changed the way in which I've done it so it's confirmed that yes I'm okay at this"</i> (participant quote).	Woolnough et al. 2006, p.191
		<i>"Actually, I learned a lot about myself, I was fairly new nurse so I was feeling like, 'am I really doing a good job?' I learned where my strengths were in my nursing career and even in my interpersonal connections with my other work mates, I learned and grew just from teaching somebody else"</i> (participant quote).	Rohatinsky et al. 2016, p.7
		<i>"It's been useful to meet with people within the trust that I probably otherwise wouldn't have met and share information. It's been a good networking opportunity"</i> (participant quote).	Woolnough et al. 2006, p.192
		<i>"Oh gosh, it's an ego buster for sure it keeps you young. I think that's all that sharing. It's more of a personal feeling of acceptance" and "I became more aware that sometimes I know more than I realize and to be able to share with somebody else. That's a good feeling"</i> (participant quote).	Pop, 2017, p.307
		<i>"I just think it [mentoring] made me look at my own self and the way I practice and things; I wanted to make sure I was living the way I was telling them"</i> (participant quote).	Pop, 2017, p.307
		<i>"as well as working with competent people at the unit level and having a chance to serve as a consultant to other nurses"</i> (author quote)	Angelini, 1995, p.92
		<i>"It's good to be seen and viewed in a positive light by other people in your profession and so forth, so I don't suppose it does me any harm in terms of reputation and that indirectly helps me achieve some of my broader goals in terms of leadership strategy and professional development"</i> (participant quote).	Woolnough et al. 2006, p.192
		<i>"It's professionally and personally satisfying to see that someone's coming on and that you're playing a small or even significant part in that."</i>	Woolnough et al. 2006, p.193

		<i>I've really enjoyed it. I think there's a humour element to a successful mentoring relationship that is often overlooked</i> (participant quote).	
		<i>"You learn so much from each other. We have even talked about different things that we learned from each other which was kind of cool, that I got to give her something back too"</i> (participant quote).	Rohatinsky et al. 2016, p.7
	The benefits for the hospital	<i>"provides a positive work environment"; "increases the amount of empowered, respected, independent RNs"; "improves patient care and safety"</i> (Participant quote).	Latham et al. 2011, p.350
		<i>"improves nurse retention rates"</i> (Participant quote).	Latham et al. 2011, p.350
		<i>"improved communication (that resulted in) better cohesive working groups"</i> (Participant quote).	Latham et al. 2011, p.351
		<i>"... you know there's going to be support there when you move and you know that even if you commit to a year, it's less scary because you know there's going to be resources there to help you transition into the community ... I think it would be absolutely more appealing"</i> (Participant quote).	Rohatinsky et al. 2016, p.7
		<i>"Because I've been promoted I've been able to make changes that affect patient care that I've wanted to for a long time but didn't have the authority to do"</i> (Participant quote).	Woolnough et al. 2014, p.117
		<i>"Mentorship] makes a stronger employee. When you're recruiting a person into...a service, you can offer them a mentorship program so that they feel they have that safety net when they're starting out their practice"</i> (Participant quote).	Rohatinsky et al 2018, p.326
		<i>"Mentors considered that the programme would contribute to the leadership agenda in their organizations, highlight that senior staff are committed to the welfare of nursing staff and improve nursing motivation, morale, recruitment and retention"</i> (Author quote).	Woolnough et al. 2006, p.190
		<i>"If there was a formal mentorship program, then it would be easier to transition"</i> (Participant quote).	Rohatinsky et al. 2016, p.4

		<p><i>"It's not just the shock of graduating, but if you're hoping to have some of those nurses move into the rural area, the mentorship program is definitely a way to facilitate that and to make it easier and to recruit people because there's so much already going on in the mind of a new grad, that to ask them to move to a community where they don't know anybody, where they're starting a completely new job, with a large amount of responsibility, that's a lot"</i> (Participant quote).</p> <p><i>"... And without her, I don't know if I actually would have stayed in that position"</i> (Participant quote).</p>	<p>Rohatinsky et al. 2016, p.4</p> <p>Rohatinsky et al. 2016, p.7</p>
Challenges of mentoring perceived by the mentor and mentee		<p><i>"Expectation is another massive barrier I find, and lack of education around mentoring students as well. Because there's that fear factor, 'Oh, my God, I don't know what I'm doing, I don't have enough ...' I have one very, very senior nurse, who feels that she doesn't have enough to give to students. And it's from a genuine place that she feels, from a time management, and from an education purpose, she doesn't have enough to give students. And this woman could teach at a university, she's absolutely fantastic but it's that fear factor in herself. I've had other nurses say to me, Oh, there's a fear factor of being shown up that I don't know enough"</i> (participant quote).</p>	Merga et al. 2020, p. 67-68
		<p><i>"unsafe work conditions"</i> (Author quote).</p>	Angelini, 1995, p.92
		<p><i>"Time is a huge barrier, I think for everyone, everyone's time poor. And it's just finding those moments to actually mentor. And then it's just everyone's just extremely busy, and everyone's got that workload that's just too exhaustive, you know, and some feel that actually taking that five minutes out to support somebody, that's the five minutes they're not going to get back. And again, it's</i></p>	Merga et al. 2020, p. 66

		<i>still related to time and pressure because, you know, the requirements of the organisation. So, it's challenging</i> (participant quote).	
		<i>"I think the usual thing that people would say would be (that) time (is a barrier), and I guess that focus on the clinical needs, really, so basically really focussing on the work that has to be done. We're finding there's that tendency toward being very task orientated, and that they don't often see that mentoring and that education is part of their everyday work. They just don't see it, and I think that the obstacle is that they don't see it as a key part of the work that they do every day"</i> (participant quote).	Merga et al. 2020, p. 67
		<i>"[communication problems with other professionals] talk to the hand"</i> (participant quote).	Latham et al. 2011, p.350
		<i>"We have to go through the charge nurse to get permission to contact the doctor, I find this very insulting"</i> (participant quote).	Latham et al. 2011, p.350
		<i>"Management sides with the doctor not the nurse. Nurses are not supporte; and Nurses get the brunt of the doctor's wrath...no matter what the facts are...mutual respect is needed. Some doctors leave nurses out of the loop with regard to patient care"</i> (participant quote).	Latham et al. 2011, p.350
		<i>"Taking breaks was not supported by upper level clinical nurses—when you go on a break, you want to know that your patient will be taken care of properly" or "you don't have confidence that they (relief nurses and other support) are doing what they should (during break coverage)"</i> (participant quote).	Latham et al. 2011, p.350
		<i>"In rural, a lot of the times you have professional people who are wearing many hats, and you don't have necessarily as many specialists as you do generalists"</i> (participant quote).	Rohatinsky et al 2018, p.325

		<i>"One NP participant described a lack of mentorship when working with a physician within the same community. The NP felt the physician was not welcoming of an NP in the community and wanted to control and limit the NP's practice" (Author quote).</i>	Rohatinsky et al 2018, p.326
		<i>"Occupational therapy and physiotherapy is the nurse's job ... and we are very much the plumbers, the floor washers and the dietary people after hours" (participant quote).</i>	Rohatinsky et al. 2016, p.3
		<i>"Well it can be quite scary for a new nurse coming to a rural facility and in particular if you have an emergency room, it's scary because you don't know what's coming through the door" (participant quote).</i>	Rohatinsky et al. 2016, p.4
		<i>"value conflicts, limited advancement and recognition opportunities, lack of support at the unit level" (Authors quote).</i>	Angelini, 1995, p.92
		<i>"... people feel they want to be reimbursed for it. So, a lot of the mentoring happens, from my staff point of view, happens during weekdays, so Monday to Friday tends to be morning shift, so they lose their penalties, so it is costly to them" (participant quote).</i>	Merga et al. 2020, p. 67
		<i>"We're seeing urban nurses float out [to rural] and they tend to flock back to the cities after a short period of time. It's definitely making it harder for us to mentor people into positions" (L008) (participant quote).</i>	Rohatinsky et al 2018, p.325
		<i>"... we're very limited in support systems, it is just you and I, two nurses, maybe three. We have to be the very best nurse because we don't have supports" (Employee C) (participant quote).</i>	Rohatinsky et al. 2016, p.5
		<i>"I really got nothing. It was like 'here's your mentor' and that was pretty much it. So it was kind of up to me and my mentor to figure out what our relationship was as opposed to having information" (Employee A) (participant quote).</i>	Rohatinsky et al. 2016, p.8
		<i>"... it would be either not approved by management or you'd have to pay out of your own pocket to go and attend the workshop. So maybe if you offered [the</i>	Rohatinsky et al. 2016, p.8

		<i>mentorship workshop in] one central rural area once a year then people can travel to [a more urban rural town] where it's not far" (Employee A) (participant quote).</i>	
		<i>"... it's a very different workplace than working in the city. And it can be very scary for them [new staff] because we have one RN, one LPN on a night shift. And we do get some very sick people" (Employee F) (participant quote)..</i>	Rohatinsky et al. 2016, p.5
		<i>"I've been amazed by what I've learnt. I think it's (glass ceiling) very real in the NHS, despite agenda for change. There's also an issue around race there as well. In fact it makes me mad that people don't talk about these things but I don't think they feel that they can do. I think it's an organisational thing. It's to do with people not feeling they have the ability to challenge things" (participant quote).</i>	Woolnough et al. 2006, p.192
		<i>"The majority of people that work for this organisation are women but there just isn't the mechanism to rise up the organisation. You almost have to go out of it to come back in. It seems to me like a complete waste of talent. We've got some excellent people in the Trust but the opportunities are just not there" (participant quote).</i>	Woolnough et al. 2006, p.192
		<i>"I've learnt an awful lot from my mentee that if we don't measure services and have good channels of communication and develop services that allow for team development and training, we're just reinforcing a sense of isolation and fragmentation" (participant quote).</i>	Woolnough et al. 2006, p.192
		<i>"Novice nurses with earlier training in care found the new role more complex, and in the case of some of them the complexity increased when work and private life became too intertwined" (Authors quote).</i>	Ronsten et al. 2005, p.317
		<i>"socio-political-cultural circumstances included occurrences experienced by staff nurses external to the hospital work setting and were mentioned by 10.8 per cent of the nurses" (Authors quote).</i>	Angelini, 1995, p.92

		<i>"limited availability of positions in certain rural communities, access to social and cultural events" (Authors quote).</i>	Rohatinsky et al 2018, p.325
		<i>"[We] have employees that probably won't be as successful in terms of retention in rural areas, or even during a period of their mentorship if they don't engage in some way with the community beyond work.... There are communities who make concerted efforts to include people in social activities, or...introduce them to the resources that the community has to offer after-hours, after work" (L006) (participant quote).</i>	Rohatinsky et al 2018, p.326
		<i>"HCPs described instances where community members were critical and unreceptive to new individuals" (Author quote).</i>	Rohatinsky et al 2018, p.326
		<i>"... you don't know anyone, and everyone else knows you're the new nurse in town, that can get a bit intimidating too ... someone will walk up to you and say, –Oh hi, I'm so and so. I heard you're the new nurse in town" (Employee F) (participant quote).</i>	Rohatinsky et al. 2016, p.4
		<i>"I have a friend who came to the community to work and she did not have either local friends or community connections and moved after a year because there was no life for her outside of work" (Employee D) (participant quote).</i>	Rohatinsky et al. 2016, p.5
		<i>"She really knows the community. She knows the people. She knows the dynamics. And without her, I don't know if I actually would have stayed in that position" (Employee B) (participant quote).</i>	Rohatinsky et al. 2016, p.7
		<i>"...if you have an authoritarian manager, the team thing goes out the window. How do you get the confidence to speak out?" (participant quote).</i> <i>"...you feel like you can't say anything without repercussions" (participant quote).</i>	Latham et al. 2011, p.350 Latham et al. 2011, p.350
Mismatched Mentor-mentee		<i>"... sometimes people just don't get on, not to say that they're not doing their work properly, or anything like that, but some people just don't see eye-to-eye. And that's fine. You can have some quite outspoken people, and you can have</i>	Merga et al. 2020, p. 65

		<i>some very quiet people, and sometimes they're not the best people to try and buddy up with each other. They're the only real issues that we ever really do see, and like I said, over, you know, five, six years I've been a manager, I've only ever had to change preceptors . . . twice, I think . . .</i> (participant quote).	
		<i>"I think the big barrier is generations, you know. You have the tea, tea is a time for sharing and joining in and things like (that) . . . but you can walk into the tea room and you'll have all four of them, with their phones on there and no communication, and they are as happy as pigs in mud because that's how they are. So sometimes I find, yes, it is difficult, or, the old nurse who wants to reinforce, you know, old principles and things, you know, because that's how they did it, and stagnant in her ways, and won't be allowing any influence from the younger generation. Or you have a younger one (who) says, you know, "Don't you come and tell me things", because they've got more confidence. When I was a nurse, when we were younger, we didn't dare to say anything to the senior nurse, that you just did (what they asked), you know, and, yeah, you've got almost like a sassy (attitude), you know . . ."</i> (participant quote).	Merga et al. 2020, p. 66
		<i>". . . you know, sometimes there's also especially generational . . . there can be a bit of a gap. I can see especially older nurses sometimes have a little bit of a resentment towards the younger nurses, because they feel like they've done the hard yards and why should they . . . you know, and they think they're a bit cocky because they've come out of university and they actually do know sometimes more than what other people know, because they are up to date with everything, and I think that's also a threat. At least, I find that that can be a boundary, to get them past just to see them not as young kids but as new nurses to develop. I think the majority are pretty good, there's just those one or two. But if you're a manager, you know your staff well, you know not to put those people . . . match them up together . . ."</i> (participant quote).	Merga et al. 2020, p. 65

		<i>"If I was assigned to somebody who I didn't feel comfortable with, it would have made a complete difference"</i> (Employee A) (participant quote).	Rohatinsky et al. 2016, p.8
		<i>"... with the common belief that mentorship would not succeed without a respectful, professional relationship between the mentor and mentee"</i> (participant quote).	Rohatinsky et al 2018, p.325
		<i>"You don't have very many people to draw from for support, there are only so many of us that work. Just like if you can't establish a good friendship with the mentor or the person being mentored, and there's nowhere else for them to go to, it can be very difficult"</i> (Employee D) (participant quote).	Rohatinsky et al. 2016, p.7

Appendix 5: Quantitative data extraction and transformation

Study	Theme/sub-theme	Outcome
Adeniran et al 2013	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for mentees 	<p>Significant difference between United states Educated nurses (UEN) and Internationally educated nurses (IEN) in the role modelling functions</p> <p>Non-significant difference between the two groups for social and career functions of mentoring.</p> <p>Professional development</p> <ul style="list-style-type: none"> Significant difference between UEN and IENs: enrolment to a degree program after licensure ($p = .01$) as well as their pursuit of advanced academic degrees ($p = .02$) <p>Career development:</p> <ul style="list-style-type: none"> Significant difference between groups for practice role ($p = .03$) (IENs were all staff nurses) and last promotion through career ladder ($p = .04$). <p>Similarities in demographic characteristics are important for role modeling function of mentoring.</p>
Fleig-palmer et al 2015	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for the hospital 	<p>Retention</p> <p>On average low score on intentions to leave 23.68(SD=31.96) [min 0 max 100]</p> <p>Organisational affective commitment</p> <ul style="list-style-type: none"> Organisational affective commitment mean score of 3.86 (SD=0.76) Interpersonal mentoring explained 35% of the variance in affective commitment. ($R^2 = .35$, $F(3, 144) = 25.83$, $p < .01$) The level of affective commitment influenced the relationship between knowledge transfer and turnover intentions. Health care workers were more likely to be considering leaving the organization when organisational affective commitment was low

Study	Theme/sub-theme	Outcome
Huang et al. 2012	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for the hospital Mismatch mentor-mentee pairs	Organisational commitment <ul style="list-style-type: none"> Interpersonal attraction was significantly associated with mentoring function received by the mentee and relationship effectiveness of the mentoring relationship ($p < 0.05$) Interpersonal attraction significantly related to relationship effectiveness ($\beta = 0.67$, $p < 0.01$) Mentoring function received was significantly related to relationship effectiveness ($p < 0.05$) Relationship effectiveness was significantly associated with organisation commitment ($p < 0.05$). Conclusion: mentoring leads to organisation commitment provided there is an effective relationship that depends on the similarity between the mentor and mentee
Jakubik, 2008	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for mentees 	<ul style="list-style-type: none"> Quality of mentoring explained 54.76% of the variance in mentoring benefits for the mentee ($p < 0.001$) Quantity of mentoring explained 13.69% of the variance in mentoring benefits for the mentee ($p < 0.001$) Type mentoring explained 1% of the variance in mentoring benefits for the mentee. This was not significant. Conclusion: The mentoring activities such as teaching, modelling, investing, giving feedback account for the mentoring benefits of the mentee. The frequency with which mentoring activities are performed also affect the outcome. The quality and quantity of mentoring is more important than the type of mentoring in realising mentoring benefits for the mentee.
	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for the hospital 	<ul style="list-style-type: none"> 52.3% of the mentees had the intention to stay at the work unit for at least one year 60.6% of the mentees had the intention to stay at the organisation for at least 1 year <p>*these were not correlated with quality, type or quantity</p>
Jakubik et al. 2011	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for mentees 	<ul style="list-style-type: none"> Quality of mentoring explained 37.21% of the variance in the mentoring benefits for the mentees ($P < 0.01$). The relationship between Quantity along with type of mentoring and benefits of mentoring was not significant.

Study	Theme/sub-theme	Outcome
	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for the hospital 	<p>Most of the respondents stated that they did not intend to leave the organization (58%). In addition, 13% of nurses stated they intended to stay longer than 5 years, and 15% of nurses stated they intended to stay 2–5 years.</p> <p>However, these were not correlated with quality, quantity and type of mentoring received by the mentees.</p>
Latham et al. 2011	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for the hospital Mismatched mentor-mentee pairs	<p>Retention measured by vacancy rates and turnover rates. Vacancy was defined as the number of open requisitions divided by the number of open requisitions and currently employed RNs; and retention was defined as the total number of RN separations divided by 1 minus total number of RN employees.</p> <ul style="list-style-type: none"> One of the hospitals improved their RN retention rate by 21% over the 3-year period (from a baseline of 76% to a 91.72% $p=0.03$). The second hospital decreased vacancy rates for RNs by 80% over 4 years (baseline 21.35 decreased to 4.28 open RN requisitions; $p=0.03$). Non-significant findings for similarity in personalities and learning styles at baseline (before initiation of mentoring program)
Mariani, 2012	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for the hospital 	<p>Intention to stay measured in years</p> <ul style="list-style-type: none"> The mean number of years for intent to stay ($n=167$) was 18.51 years ($SD=8.38$) The mean number of years for intent to stay ($n=167$) was 18.51 years ($SD=8.38$). There was no statistically significant difference in the number of years nurses intended to stay for those who did and those that did not participate in a mentoring relationship ($P=0.42$)
Pham et al 2019	The benefits of mentoring programs	<ul style="list-style-type: none"> Mentoring was significantly related to intentions to leave the nursing profession. This relationship was mediated via the pathway of rapport between the mentor and mentee, willingness to mentor or be mentored, self-efficacy, outcome expectations and career goals.

Study	Theme/sub-theme	Outcome
	<ul style="list-style-type: none"> The benefits for the hospital 	
Schroyer et al (2020).	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for the hospital 	The nurses assigned a mentor are retained at a higher rate than nurses who were not mentored (p= 0.009).
Weese et al. 2015	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for mentees 	<ul style="list-style-type: none"> There was a significant relationship between mentoring practices and total mentoring benefits (p = 0.01). Mentoring practices explained 79% of the variation in mentoring benefits The mentoring benefits for the mentee included sense of belonging, career optimism, competence, professional growth, security on the job and readiness for leadership.
Weng et al 2010	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for the hospital 	Of the three mentoring functions, career and role modelling functions had a significant positive impact on organisational commitment. The relationship between psychosocial functions and organisational commitment was not significant
Witter et al. 2013	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for the hospital 	<ul style="list-style-type: none"> There were no significant differences on the pre- and post-tests for the no mentoring group. The post-mentoring scores for nurses who received mentoring, significant differences were found for Willingness to Remain in the Nursing Profession (p = 0.028).
Zhang et al. 2019	The benefits of mentoring programs <ul style="list-style-type: none"> The benefits for the hospital 	<ul style="list-style-type: none"> The 1-, 2- and 3-year turnover rates for the experimental group were 3.77%, 3.48%, and 8.11% compared to 14.07%, 9.36%, and 14.19% for the control group, respectively. For the matched pairs, the 1-year turnover rate of new graduate nurses in the experimental group was significantly lower than that of the control group (p < 0.05), while the 2- and 3-year rates were not significantly different between the two groups (p > 0.05)

Appendix 6: Summary of studies included in the review.

No.	Author, year, country	Aim/purpose/objective	Methods, sample, setting	Mentoring program/dimensions	Instruments used to measure outcome of mentoring	Main findings
1	Austin et al 2021 Country: UK	To evaluate the personal professional mentor role and scheme, a new pastoral support initiative, from the perspective of participating newly qualified nurses	Design: Qualitative descriptive study Study Duration: 2017 and 2018 Participants: 12 NQNs Age: not reported Gender: not reported Setting: Children's hospital	Mentoring program	Experiences with the mentoring program	The mentoring program made support accessible. They used informal approaches to initiate the mentoring relationship. Mentoring enabled transition of the newly graduated nurse
2	Bullock, et al 2022 Country: USA	To present the development and implementation of a novel NP/PA mentorship model titled CATAPULT: Coaching Advancement to All Providers Using Leadership Tools	Quality improvement project with post-evaluation design Participants: 4 mentors and 4 mentees Age: not reported Gender: not reported Setting: University of Maryland Upper Chesapeake Health (UM UCH) medical system	Mentoring program	10-item instrument to evaluate mentoring program measured on 4-point Likert scale	Mentees agreed or strongly agreed with 9/10 statements regarding the help received from their mentor

No.	Author, year, country	Aim/purpose/objective	Methods, sample, setting	Mentoring program/dimensions	Instruments used to measure outcome of mentoring	Main findings
3	Choi, et al 2022 Country: Korea	To investigate the novice nurses' perception of the effects of preceptors' mentoring function on their self-efficacy and organizational commitment	Design: cross-sectional study Study Participants: 160 novice nurses with less than 1year experience Age: majority below age of 26 Gender:26 males, 134 females Setting: Korean general hospitals	Mentoring functions: 23 items measuring career development, psychosocial support, and role modelling, measured on 5-point Likert scale	Self-efficacy measured with 17-items on a 5-point Likert scale. Organisation commitment measured with 8 items on a 5-point Likert scale.	The effect of mentoring functions on self-efficacy was positive and significant (B=.38, p<.001) The effect of mentoring functions on organisation commitment was positive and significant (B=.48, p<.001)
4	Coventry, et al 2021 Country: Australia	To examine how nurse managers in metropolitan healthcare organisations in Western Australia perceive intergenerational mentoring and its place in the contemporary workforce.	Design: qualitative descriptive study Participants: 20 nurse managers Age: 11 nurses between 40-49years Gender: 16 females and 4 males Setting: metropolitan public and private hospitals in Western Australia (WA)		Mentoring experience and perceptions	Shared understanding of the meaning of multigenerational mentoring, Acknowledge that mentoring had a positive value to the workplace. Mentoring pays an important role in shaping the profession. Mentoring has role in transmitting workplace culture of support, and quality care.

No.	Author, year, country	Aim/purpose/objective	Methods, sample, setting	Mentoring program/dimensions	Instruments used to measure outcome of mentoring	Main findings
5	Coyne, et al 2019 Country: USA	a) identify factors that may influence perceived job satisfaction among novice nurses at 1 year, (b) determine if the implementation of an NNSG will increase engagement of novice nurses in their assigned units at 1 year, (c) evaluate the novice nurses' perception of mentoring and support activities at 1 year, and (d) evaluate 1 year retention rates of all novice nurses participating in the NNSG.	Design: pre/post survey design Participants: Age: mean= 27.37years Gender: n=1 male, n=22 female Setting: Christiana Hospital, a Level 1 trauma center located in Newark, Delaware	The mentoring program	Casey–Fink Nurse Retention (CFNR) Instrument to measure retention. the tool has 4 sections. <ul style="list-style-type: none"> • Stress • Job satisfaction • Recognition and praise • Professional development 	Non-significant effect on job satisfaction Nurses highlight a variety of ways they prefer to be recognised in mentoring relationships such as diamonds, verbal recognition, feedback, job incentives
6	Drury, et al 2022 Country: USA	To fully understand the nature and benefits for the mentor participating in a mentorship program with new oncology nurses in a nurse residency program at the Huntsman Cancer Institute at the University of Utah in Salt Lake City, an academic oncology hospital.	Design: descriptive pilot using a mixed-methods design Participants: n=11 mentors Age: mean=33years Gender: not described Setting: an academic oncology hospital	The mentoring program	Professional quality of life measured with 30-items on a 5-point Likert scale.	Mentoring had impact on professional quality of life with significant decrease in burnout (22.9 to 18.6, $p = 0.003$), traumatic stress (22.3 to 19, $p < 0.06$). Qualitative responses showed mentoring program enabled self-reflection, reduced burnout, provided emotional support

No.	Author, year, country	Aim/purpose/objective	Methods, sample, setting	Mentoring program/dimensions	Instruments used to measure outcome of mentoring	Main findings
7	Gayrama-Borines, et al 2021 Country: USA	to describe a mentorship program for nurses who transfer into the emergency department.	Design: quality improvement design followed the FADE (focus, analyse, develop, execute, and evaluate) methodology Participants: 3 mentor and 3 mentees (data available for only two). Age: not stated. Gender: not stated. Setting: a large private community hospital in the Southwestern United States	The mentoring program	Rating of the mentor's Mentoring Competency Assessment (MCA) measured with 6 items on Likert scale. Intent to Stay/Leave Job measured with 15 items.	Overall increase in mentor's competency post program No significant differences in Intention to stay. Qualitative data showed mentoring was important for transition, and avail support for new nurses
8	Gong et al 2019 Country: China	To explore the relationship between contextual issues established by mentors and career adaptability	Design: cross-sectional N=303 81.2% females Majority (49.5%) between 26-30 years Five general hospitals and one community hospitals	Feedback environment established by the mentor measured with 21 items on 7-point Likert scale	Career adaptability measured with 24 items	Non-significant effect of feedback environment on career adaptability ($\beta=.13$, $p=.30$) Significant indirect effect via feedback seeking $\beta=.11$, 95%CI [.01—.22)

No.	Author, year, country	Aim/purpose/objective	Methods, sample, setting	Mentoring program/dimensions	Instruments used to measure outcome of mentoring	Main findings
9	Gong et al 2022 Country: China	Participants: 371 first line nurses To explore the mechanisms of influence of nurses' mentoring relationship on organizational commitment	Design: cross-sectional study Age: M=23.78 Gender: 43 males and 328 females Setting: six regional general hospitals	Mentoring relationship factors consisting of career guidance, psychosocial support and role models measured with 9 items on 5-point Likert scale	Organisation commitment measured with 9-items on 5-point Likert scale. Career optimism measured with 11 items on 5-point Likert scale.	A significant direct effect of mentoring relationship on organizational commitment ($B=.49$, $p<.001$). Indirect effect of mentoring relationship on organizational commitment $\beta=.17$, 95%CI [.08—.28) A significant direct effect of mentoring relationship on career optimism ($B=.67$, $p<.001$)
10	Horner, 2017 Country: USA	to determine whether mentoring, based on Watson's Caring Model, positively influences Nurse Practitioner's job satisfaction?	Design: mixed methods study with cross-sectional survey and open-ended questions Participants: n=37, NPs licensed to practice in the state and were certified by one of the nationally recognised certifying bodies.	Mentoring variables included presence of a mentor, gender of mentor, formal or informal, was it beneficial, length of time, forms of	Did this experience/relationship positively influence your job satisfaction?	100 % of participants believed mentoring influenced their job satisfaction Qualitative data showed acknowledge the mentor was resourceful. Factors such as workload, non-fit for the role were some of the reasons for not intending to mentor in future

No.	Author, year, country	Aim/purpose/objective	Methods, sample, setting	Mentoring program/dimensions	Instruments used to measure outcome of mentoring	Main findings
			<p>Age: between 27-67 years</p> <p>Gender: not stated</p> <p>Setting: a large, urban health care setting in central Indiana</p>	interaction, and influence on job satisfaction		
11	Jangland, et al 2021 Country: Sweden	To evaluate the implementation of a multifaceted mentoring programme in a large university hospital and describe its value from the perspectives of newly graduated nurses, experienced nurses and the hospital organisation.	<p>Design: multiple-case study design</p> <p>Participants: A convenient sample of participants included nurses taking or having completed the programme (n = 10), nurse managers (interviewed twice) (n = 5), clinical supervisors (n = 8), group supervisors in reflection groups (n = 4) and theoretical supervisors (n = 3)</p>	Mentoring program	Experiences with the program	The program aligned with the specific needs of newly graduated nurses, offered senior nurses a fresh career prospect, and enhanced the overall appeal of the workplace. The central theme of the program, which revolved around instilling confidence in new nurses, providing experienced nurses with a positive challenge, and presenting the organization with an avenue for learning, exemplifies the inherent value of the program's supervisory model. This model effectively caters to the developmental requirements of both novice and seasoned

No.	Author, year, country	Aim/purpose/objective	Methods, sample, setting	Mentoring program/dimensions	Instruments used to measure outcome of mentoring	Main findings
			Age: 10 nurses between 23-31 Gender: 28 females Setting: a large Swedish university hospital			nurses, while simultaneously benefiting the organization as a cohesive entity.
12	Kramer, et al 2021 Country: USA	: to explore nurses' perceptions of a mentoring culture within a hospital environment	Design: qualitative descriptive study Participants: n=18 bedside nurses, n=24 nurse leaders Age: mean =48years Gender: n=38 females, n=4 males Setting: Six hospitals from a large not-for profit healthcare organization in Southeastern United States	Examined the mentoring culture within the organisation		Findings include: (1) diverse mentoring models, distinctions between informal and formal approaches, a focus on leadership, and the notion of an evolving culture. (2) mentoring was about going beyond expectations, fostering lifelong relationships, facilitating personal and professional growth, and feeling genuinely cared for. (3) Benefits associated with mentoring, such as forging valuable connections, promoting development, enhancing retention rates, ensuring stability, safeguarding patient safety, and making a tangible difference. (4) Barriers that impeded effective mentoring, including challenges

No.	Author, year, country	Aim/purpose/objective	Methods, sample, setting	Mentoring program/dimensions	Instruments used to measure outcome of mentoring	Main findings
						related to time constraints, the need for patience, competition among nurses, a lack of understanding regarding the distinctions between mentor and preceptor roles, inadequate incentives, and difficulties in garnering receptiveness.
13	Krofft, et al 2021 Country: USA	to describe the implementation of an evidence-based mentoring program for new registered nurses (RNs) hired into medical-surgical units	Design: Quality improvement design using the Plan-Do-Check-Act framework Participants: Age: not reported Gender: not reported Setting: community-based hospital	Mentoring program	Intention to stay measured with 15 questions measured on a 7-point Likert scale. Job Satisfaction scale has 26 items measuring the degree of satisfaction on a 5-point Likert scale. Mentor Program Satisfaction survey	After 3 months mean program satisfaction at 49 for mentees, at 33 for mentors. Means job satisfaction at 88.3

No.	Author, year, country	Aim/purpose/objective	Methods, sample, setting	Mentoring program/dimensions	Instruments used to measure outcome of mentoring	Main findings
					<p>has 9 questions measuring the degree of satisfaction on a 5-point Likert scale.</p> <p>Mentee Program Satisfaction survey has 12 questions measuring the degree of satisfaction on a 5-point Likert scale.</p>	
14	Mijares, 2020 Country: USA	To determine whether a short-term structured mentorship program led by a clinical nurse specialist increased work engagement among staff nurses within 8 to 10 weeks.	Design: quality improvement project using the PICOT (Population, Intervention, Comparison, Outcome[s], and Time) framework Participants: 9 nurses	Mentoring program	Work engagement Advancement on clinical ladder	As a result of the mentoring program, the organization has successfully provided training to an additional 167 mentors, leading to an overall advancement rate of 27% for nurses on the clinical ladder. Furthermore, advanced practice

No.	Author, year, country	Aim/purpose/objective	Methods, sample, setting	Mentoring program/dimensions	Instruments used to measure outcome of mentoring	Main findings
			Age: 50% between 21 to 30 years Gender: not reported Setting: adult medical care and an adult step-down surgical care unit (unit A and unit B) within a 900-bed, level 1 trauma, academic hospital in southern California			registered nurses have incorporated mentorship into their onboarding process for advanced practice nursing, highlighting the organization's commitment to fostering mentorship practices across various professional levels.
15	Moss, 2022 and Moss et al 2022 Country: USA	To measure utilization and meaningfulness of National Association of Neonatal Nurse Practitioners (NANNP) mentoring toolkit activities. To determine the impact of participation in the NANNP formalized mentoring program on job satisfaction and retention for novice and experienced NNPs	Design: Quality improvement design Participants: two cohorts of 21 Neonatal Nurse Practitioners. n=11 mentors and n=10 mentees) Age: not reported Gender: not reported Setting: level IV NICU	Utilization and Meaningfulness of mentoring activities participation NANNP formalized mentoring program before and after implementation of the program	.Job satisfaction measured with 44 items from Misener Nurse Practitioner Job Satisfaction Scale Intention to stay measured with 2 items	Notably better scores on the job satisfaction after 6-months of the program. Job satisfaction was correlated with intention to stay at 3 years

No.	Author, year, country	Aim/purpose/objective	Methods, sample, setting	Mentoring program/dimensions	Instruments used to measure outcome of mentoring	Main findings
16	Rohatinsky, et al 2020 Country: Canada	to describe a rural-specific pilot mentorship program that was implemented and evaluated in terms of supporting rural mentorships, easing workplace transition, strengthening community connections, and encouraging recruitment and retention in rural communities	Participants: n=8 mentor, n=6 mentees Age: 9 participants between 18-30 years Gender: all female Setting: rural healthcare	Mentoring program		The mentoring program provided opportunities for nurses to connect with colleagues and the community. Communication was an important enabling factor. Support for the mentee and the program was an important mentoring opportunity.

Appendix 7: critical appraisal of the studies included in the updated review.

Table 1: Critical appraisal for analytical cross-sectional studies

Citation	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	SCORE
Horner, et al 2020*	Y	Y	U	Y	U	U	Y	Y	5
Choi, et al 2022	Y	Y	Y	Y	Y	Y	Y	Y	8
Gong, et al 2022	Y	Y	Y	Y	Y	Y	Y	Y	8
Gong , et al 2019	Y	Y	Y	Y	Y	Y	Y	Y	8

**study used a mixed methods design Y=YES, N=no, NA=not applicable, U=unclear*

Q1. Were the criteria for inclusion in the sample clearly defined?

Q2. Were the study subjects and the setting described in detail?

Q3. Was the exposure measured in a valid and reliable way?

Q4. Were objective, standard criteria used for measurement of the condition?

Q5. Were confounding factors identified?

Q6. Were strategies to deal with confounding factors stated?

Q7. Were the outcomes measured in a valid and reliable way?

Q8. Was appropriate statistical analysis used?

Accessed via Moola S, Munn Z, Tufanaru C, Aromataris E, Sears K, Sfetcu R, Currie M, Qureshi R, Mattis P, Lisy K, Mu P-F. Chapter 7: Systematic reviews of etiology and risk . In: Aromataris E, Munn Z (Editors). JBI Manual for Evidence Synthesis. JBI, 2020. Available from <https://synthesismanual.jbi.global>

Table 2: Critical appraisal for quasi-experimental studies

Citation	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	SCORE
Moss, 2022 AND Moss et al 2022*	Y	Y	Y	N	Y	Y	Y	Y	Y	8
Mijares, et al 2020	Y	Y	Y	N	N	N	Y	U	Y	5
Bullock, et al 2022	Y	N	NA	N	N	Y	NA	Y	Y	4
Krofft, et al 2021	Y	N	NA	N	N	U	NA	Y	Y	3
Gayrama et al 2021*	Y	Y	Y	N	N	Y	Y	U	N	5

Drury, et al 2022*	Y	Y	Y	N	Y	Y	Y	U	Y	7
Coyne, et al 2020*	Y	Y	Y	N	Y	Y	Y	Y	Y	8

*study used a mixed methods design Y=YES, N=no, NA=not applicable, U=unclear

Q1. Is it clear in the study what is the 'cause' and what is the 'effect' (i.e. there is no confusion about which variable comes first)?

Q2. Were the participants included in any comparisons similar?

Q3. Were the participants included in any comparisons receiving similar treatment/care, other than the exposure or intervention of interest?

Q4. Was there a control group?

Q5. Were there multiple measurements of the outcome both pre and post the intervention/exposure?

Q6. Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?

Q7. Were the outcomes of participants included in any comparisons measured in the same way?

Q8. Were outcomes measured in a reliable way?

Q9. Was appropriate statistical analysis used?

Accessed via Tufanaru C, Munn Z, Aromataris E, Campbell J, Hopp L. Chapter 3: Systematic reviews of effectiveness. In: Aromataris E, Munn Z (Editors). **JBIManual for Evidence Synthesis**. JBI, 2020. Available from <https://synthesismanual.jbi.global>

Table 3: Critical appraisal for qualitative research

Citation	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	SCORE
Drury, et al 2022*	U	Y	U	U	U	N	N	Y	Y	Y	4
Gayrama et al 2021*	U	Y	U	U	U	N	N	Y	Y	Y	4
Horner, et al 2020*	U	Y	U	U	U	N	N	N	Y	Y	3
Moss, 2022 *	U	Y	U	U	U	N	N	Y	Y	Y	4
Austin, et al 2021	U	Y	Y	Y	Y	N	N	Y	Y	Y	7
Coventry et al 2021	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	9
Jangland et al 2021	U	Y	Y	Y	Y	Y	Y	Y	Y	Y	9
Kramer, et al 2021	U	Y	Y	Y	Y	N	N	Y	Y	Y	7
Rohatinsky, et al 2020	U	Y	Y	Y	Y	N	N	Y	Y	Y	7
Coyne, et al 2019*	U	Y	U	U	U	N	N	Y	Y	Y	4

*study used a mixed methods design Y=YES, N=no, NA=not applicable, U=unclear

Q1. Is there congruity between the stated philosophical perspective and the research methodology?

Q2. Is there congruity between the research methodology and the research question or objectives?

Q3. Is there congruity between the research methodology and the methods used to collect data?

- Q4. Is there congruity between the research methodology and the representation and analysis of data?
- Q5. Is there congruity between the research methodology and the interpretation of results?
- Q6. Is there a statement locating the researcher culturally or theoretically?
- Q7. Is the influence of the researcher on the research, and vice- versa, addressed?
- Q8. Are participants, and their voices, adequately represented?
- Q9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?
- Q10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?

Accessed via Lockwood C, Munn Z, Porritt K. Qualitative research synthesis: methodological guidance for systematic reviewers utilizing meta-aggregation. *Int J Evid Based Healthc*. 2015;13(3):179–187.

Appendix 8: permission to use the data collection instruments.

Permission to use mentoring questionnaire

4

Dear Dr Ragins


I am a doctoral candidate from Flinders University South Australia.

I am requesting for permission to use your questionnaire to measure, mentoring intentions, costs and benefits of my participants . Please find attached a letter requesting for your consent.

Looking forward to hearing from you soon!

Thank you!

Tracy





Belle Rose Ragins <ragins@uwm.edu>
To: Tracy Kakyo

Wed 4/28/2021 3:50 AM

permission to use mentoring...
275 KB

Ragins 2012 Page Proofs Rel...
851 KB

Ragins, 2016 Relational Ment...
654 KB

3 attachments (2 MB)  Save all to OneDrive - Flinders  Download all

Hi Tracy

Of course you have my permission to use these instruments!

I've also attached a new instrument on relational mentoring (see Table 39.1) and an article that describes the theory.

The instrument is designed to capture high quality mentoring relationships. Other scholars have used it and it shows excellent reliability. You could use the entire instrument - or just the subscales - depending on your research questions

Good luck with your research!

Permission to use the negative mentoring experiences questionnaire

📎 1 🔍 +

📎 permission to use mentoring...
124 KB

Dear Dr Eby,

I am a doctoral candidate from Flinders University South Australia.

I am requesting for permission to use your questionnaire to study negative mentoring experiences of participants in my study. Please find attached a letter requesting for your consent.

Looking forward to hearing from you soon!
Thank you!

Tracy Kakyo



Lillian Turner Eby <leby@uga.edu> [in](#)

To: Tracy Kakyo

Cc: Lillian Turner Eby <leby@uga.edu>

😊 ↩️ ⏪ ⏩ ⋮

Tue 6/29/2021 9:12 PM

Thanks for your interest in my work. This is fine and I assume that you will also cite the original work in any subsequent papers (published or unpublished) per APA guidelines.

Take care,
Lillian

From: Tracy Kakyo <tracy.kakyo@flinders.edu.au>

Date: Tuesday, June 29, 2021 at 7:02 AM

To: self <leby@uga.edu>

Subject: Permission to use the negative mentoring experiences questionnaire

[EXTERNAL SENDER - PROCEED CAUTIOUSLY]

Permission to use Geo, NEO, REO questionnaire

1 1

Dear Dr Yoshikawa,

I am a doctoral candidate from Flinders University South Australia.

I am requesting for permission to use your questionnaire to study generalized, negotiated and reciprocal exchange orientation of my participants . Please find attached a letter requesting for your consent.

Looking forward to hearing from you soon!

Thank you!

Tracy



吉川克彦 <katsuhiko78@gmail.com> [in](#)

😊 ↩️ ↶️ ↷️ ⋮

Tue 4/13/2021 11:27 PM

To: Tracy Kakyo

Cc: Lily Xiao

Hi Tracy (cc: Lily),

Thank you for contacting me. You do not need to get my permission, as the survey items are already in public domain (i.e., reported in a published article). I understand academic research is to produce knowledge for society, and our research builds on what prior researchers have done. So, I am glad to learn that you are now trying to build on what we have done. Good luck for your research endeavours, and feel free to contact me if you need any further information regarding the use of the scale.

Best regards,
Katsu

Permission to use the Perceived Organisation support Questionnaire

1 1 1 1 1



Tracy Kakyo

Dear Dr Eisenberger, I am a doctoral candidate from Flinders University South Australia. I am requesting for per...

Tue 4/13/2021 8:18 PM



Eisenberger, Robert W <reisenbe@Central.UH.EDU>

To: Tracy Kakyo; reisenberger2@uh.edu

Cc: Lily Xiao

Hi Tracy,
I am happy to give you permission to use the POS scale for your research.
Cordially,
Bob

Robert Eisenberger
Professor of Psychology
College of Liberal Arts & Soc. Sciences
Professor of Leadership and Management
C. T. Bauer College of Business
University of Houston
reisenberger2@uh.edu
(302)353-8151



Tue 4/13/2021 11:37 PM



Tracy Kakyo

Thank you very much, Dr Eisenberger! Tracy Get Outlook for Android

Thu 4/15/2021 2:02 PM

Appendix 9: Research Ethics committee approvals for phase one.

Ethics approval: Phase one Flinders University Human Ethics

10 June 2021



HUMAN ETHICS LOW RISK PANEL

APPROVAL NOTICE

Dear Ms Tracy Kakyō,

The below proposed project has been approved on the basis of the information contained in the application and its attachments.

Project No: 4525
Project Title: Hospital nurses' perceptions of factors affecting mentoring attributes in Uganda
Primary Researcher: Ms Tracy Kakyō
Approval Date: 10/06/2021
Expiry Date: 31/12/2021

Please note: Due to the current COVID-19 situation, researchers are strongly advised to develop a research design that aligns with the University's COVID-19 research protocol involving human studies. Where possible, avoid face-to-face testing and consider rescheduling face-to-face testing or undertaking alternative distance/online data or interview collection means. For further information, please go to <https://staff.flinders.edu.au/coronavirus-information/research-updates>.

RESPONSIBILITIES OF RESEARCHERS AND SUPERVISORS

1. Participant Documentation

Please note that it is the responsibility of researchers and supervisors, in the case of student projects, to ensure that:

- all participant documents are checked for spelling, grammatical, numbering and formatting errors. The Committee does not accept any responsibility for the above mentioned errors.
- the Flinders University logo is included on all participant documentation (e.g., letters of introduction, information sheets, consent forms, debriefing information and questionnaires – with the exception of purchased research tools) and the current Flinders University letterhead is included in the header of all letters of introduction. The Flinders University international logo/letterhead should be used and documentation should contain international dialing codes for all telephone and fax numbers listed for all research to be conducted overseas.

2. Annual Progress / Final Reports

In order to comply with the monitoring requirements of the *National Statement on Ethical Conduct in Human Research 2007* (updated 2018) an annual progress report must be submitted each year on the approval anniversary date for the duration of the ethics approval using the HREC Annual/Final Report Form available online via the ResearchNow Ethics & Biosafety system.

Please note that no data collection can be undertaken after the ethics approval expiry date listed at the top of this notice. If data is collected after expiry, it will not be covered in terms of ethics. It is the responsibility of the researcher to ensure that annual progress reports are submitted on time; and that no data is collected after ethics has expired.


If the project is completed before ethics approval has expired please ensure a final report is submitted immediately. If ethics approval for your project expires please either submit (1) a final report; or (2) an extension of time request (using the HREC Modification Form).

For student projects, the Low Risk Panel recommends that current ethics approval is maintained until a student's thesis has been submitted, assessed and finalised. This is to protect the student in the event that reviewers recommend that additional data be collected from participants.

3. Modifications to Project

Modifications to the project must not proceed until approval has been obtained from the Ethics Committee. Such proposed changes / modifications include:

Phase one: TASO Research Ethics Committee



**The AIDS Support Organisation
(TASO) Uganda Ltd.**

TASO Headquarters
Mulago Hospital Complex
P.O. Box 10443, Kampala-Uganda
Tel: +256 414 532 580/1
Fax: +256 414 541 288
Email: mail@tasouganda.org
Website: www.tasouganda.org

27th August, 2021

TASO COLLEGE OF HEALTH SCIENCES (TACHS)
Kanyinya Off Gayaza Road,
Alber Marerwe
P.O. Box 10443, Kampala
Tel: +256 414 567 637
Fax: +256 414 566 704
Email: tachs@tasouganda.org

SERVICE CENTRES

TASO ENTERBE
Plot 15-17 Lugard Avenue
P.O. Box 235, Entebbe
Tel: 0414 320 030/0752 774 135
Email: enterbe@tasouganda.org

TASO GULU
Plot 4 Mathew Lukwiny Road
P.O. Box 347, Gulu
Tel: 0471 432743/0752 774 142
Email: gulu@tasouganda.org

TASO JINJA
Jinja Referral Hospital
P.O. Box 577, Jinja
Tel: 038260 117/0752 774 145
Fax: 0434 120362
Email: jinja@tasouganda.org

TASO MASAKA
Masaka Hospital
P.O. Box 1679, Masaka
Tel: 0382 749 980/0752 774 145
Email: masaka@tasouganda.org

TASO MASINDI
Masindi Hospital
P.O. Box 117, Masindi
Tel: 0465 420 636/0752 774 144
Fax: 0465 420 636
Email: masindi@tasouganda.org

TASO MBALE
Mbale Hospital
P.O. Box 2250, Mbale
Tel: 0454 433 507/0752 774 137
Email: mbale@tasouganda.org

TASO MBARARA
Plot 25 and 27 Hospital Road
P.O. Box 1010, Mbarara
Tel: 0485 421 323/0752 774 136
Fax: 0485 421 323
Email: mbarara@tasouganda.org

TASO MULAGO
Mulago Hospital
P.O. Box 11485, Kampala
Tel: 0414 530 034/0752 774 139
Fax: 0414 541 288
Email: mulago@tasouganda.org

TASO RUKUNGIRI
Rukungiri Road
P.O. Box 350, Rukungiri
Tel: 0486 442 610/0752 774 141
Fax: 0486 442 613
Email: rukungiri@tasouganda.org

TASO SOROTI
Soroti Hospital
P.O. Box 422, Soroti
Tel: 0454 461 380/0752 774 143
Fax: 0454 461 042
Email: soroti@tasouganda.org

TASO TORORO
Plot 30, Cox Road
P.O. Box 777, Tororo
Tel: 0454 442 006/0752 774 140
Fax: 0454 446 334
Email: tororo@tasouganda.org

DISCRETE PROJECTS

GRANTS MANAGEMENT UNIT / GLOBAL FUND
House of Hope, Plot 10
Windsor Loop
P.O. Box 10443, Kampala
Tel: 0414 259 555/0752 774 109
Email: mg@tasouganda.org

SOROTI REGIONAL PROJECT (SORP)
Soroti Hospital
P.O. Box 422, Soroti
Tel: 045461380 / 0700 541 404
Email: soroti@tasouganda.org

USAD LPS-ANKOLE PROJECT
Plot 25 & 27 Hospital Road
P.O. Box 1010, Mbarara
Tel: 0485421323/0752-774 119
Fax: 0485 421323
Email: ankole@tasouganda.org

TASO RHITE N. LANGO
Apac District Health Offices
P.O. Box 1 Apac
Tel: 0752-774-262
Email: tasouapac@tasouganda.org

Our Ref: # TASOREC/056/2021-UG-REC-009

Tracy Alexis Kakyo
Flinders University-Australia
tracy.kakyo@flinders.edu.au

Dear Tracy,

RE: RESEARCH APPROVAL "EXPLORING MENTORING FOR HOSPITAL NURSES IN UGANDA: A MIXED METHODS STUDY."

Thank you for responding to the committee's request for further information.

On behalf of the committee, I am pleased to confirm that your correspondence bearing the revised documentation on **04th August 2021** with responses to initial review comments of **29th July 2021**, met the requirements for approval.

TASO REC, at its full review meeting gave a favorable ethical opinion of the research, and annual approval has been granted, effective **27th August 2021**, valid until **26th August 2022**.

Final list of documents reviewed and approved:

Document Type	Date	Version
1. The Study Protocol.	17/03/2021	1.0
2. Informed Consent Forms	17/08/2020	1.0
3. Data Collection Tools	17/08/2020	1.0
4. TASO REC Research Application and DOC of Interest.	16/07/2021	2.0
5. Introductory Letter from Flinders University	20/05/2021	

After ethical review:

Amendments: All proposed amendments to the study (including personnel, procedures, or documents) must be approved by the REC in advance before the study commences.

Adverse Events/Unanticipated Problems: It is your responsibility to inform the REC of any adverse consequences to participants that occur in the course of the study.

Site Monitoring Visits: shall be undertaken to verify that only approved procedures are being implemented, to ensure that the rights and welfare of participants are being protected.


Study Reports: It is a requirement by the REC that you submit timely progress reports.

Renewal of the study approval: This should be through submission of the Annual Report and a Continuing Review Application, at least 60 days prior to expiration date.

Protocol documents which contain the REC-stamp (if applicable), must be utilized during recruitment of participants, obtaining informed consent and data collection processes.

We recommend that you proceed with the registration and final clearance of your study by the Uganda National Council of Science and Technology (UNCST) before commencement.

Yours sincerely,



Dr. Adrian Jjuuko,
Chairperson, TASO RESEARCH ETHICS COMMITTEE (REC)
Executive Director, TASO (U) Limited
Co-Chairman, National Council for Science & Technology (UNCST)

Appendix 10: Survey questionnaire

Hospital nurses' and midwives' perceptions of factors affecting mentoring in Uganda

This survey seeks to study the characteristics that are important in establishing mentoring relationships for nurses/midwives working in hospital settings. The survey has seven sections and should take 20 minutes to complete. There are no right or wrong answers, every response is valid. Please respond by selecting (clicking on) the option that best relates to your response.

Glossary

- Mentoring is defined as a professional development approach in which nurses/midwives and the hospital interact in a reciprocal manner with the goal of helping the new nurse/midwife adapt to and socialise in clinical practice. In this interaction there are responsibilities and benefits for the mentor, the mentee, and the organisation; fulfilment of which leads to an excellent relationship.
- Informal mentoring is any mentoring relationship initiated and sustained by the nurses/midwives with their colleagues or supervisors.
- Formal mentoring is a mentoring relationship that is initiated by the organisation/hospital. The organisation does this by matching the mentor and mentee, providing coordination for mentoring activities and providing training on mentoring.
- A mentor is someone with competency that is admirable to the rest of his peers with potential to pass on the knowledge and skill as well as role model attitude.
- A mentee is someone with the willingness and motivation to learn from a mentor.

Part A: Demographic characteristics

1. How many years have you worked as a nurse/midwife in clinical/hospital settings?

2. What is your gender?
 - a. Female
 - b. Male
 - c. Other. _____
 - d. Prefer not to say
3. What is your age?
_____ years
4. What type of facility do you work for?
 - a. Government/public
 - b. Private not for profit
 - c. Private for profit
5. What is your registration status?
 - a. Nurse

- b. Midwife
 - c. Both nurse and midwife
6. What is your highest qualification in nursing/midwifery?
- a. Certificate
 - b. Diploma
 - c. Bachelor's degree
 - d. Postgraduate qualification in nursing/midwifery
7. Which department in the hospital do you work in?
- a. Surgery
 - b. Medical
 - c. Psychiatry
 - d. Obstetrics and gynaecology
 - e. Paediatric
 - f. Others (please specify) _____
8. What position do you hold in this hospital?
- a. Staff nurse/midwife
 - b. Ward in-charge
 - c. Head of department
 - d. Others (please specify) _____
9. Have you participated in mentoring activities (teaching, role-modelling, coaching, advising, psychosocial support) before?
- a. Yes
 - b. No
10. If yes to 9 above, what type of mentoring best characterised that relationship (refer to glossary for the definitions)
- a. Informal mentoring
 - b. Formal mentoring
 - c. Both informal and formal mentoring
11. If yes to 9, please describe your overall mentoring experience above in space below; highlighting the following areas: how did the mentoring relationship start, what was your role in this relationship, how long did mentoring relationship last, what goals did you achieve from this mentoring relationship?
- _____
- _____
- _____
12. Have you ever received any training on how to be a mentor?
- a. Yes
 - b. No
13. In your opinion, how long should an ideal mentoring relationship last?
- _____ months
- OR _____ years
14. On a scale of 0 to 10, how likely are you to stay working for this hospital in the next 5 years?

Not likely									Most certain
1	2	3	4	5	6	7	8	9	10

b. Please explain your answer above

15. On a scale of 0 to 10, how likely are you to participate in a formal mentoring program established by the hospital?

Not likely									Most certain
1	2	3	4	5	6	7	8	9	10

b. Please explain your answer above

16. In what capacity would you like to participate in a mentoring program

- a. Mentor
- b. Mentee
- c. Both

17. On a scale of 0 to 10, how likely are you to get a promotion at this hospital in the next 5years?

Not likely									Most certain
1	2	3	4	5	6	7	8	9	10

18. On a scale of 0 to 10, how likely are you to advance your academic qualification in the next 5years?

Not likely									Most certain
1	2	3	4	5	6	7	8	9	10

Part B: Perceived cost of mentoring

The following items relate to the cost of engaging in a mentoring relationship. Reflecting on mentoring activities you have had with a colleague and/or supervisor, please indicate your level of agreement: 1 completely disagree, 2 strongly disagree, 3 disagree, 4 neutral, 5 agree, 6 strongly agree and 7 completely agree. Select the most true answer

	Completely disagree	Strongly disagree	Disagree	Neutral,	Agree	Strongly agree	Completely agree
Mentoring takes more time than it's worth.	1	2	3	4	5	6	7
Mentoring takes too much time away from one's own job.	1	2	3	4	5	6	7
Mentees can end up taking the mentor's job.	1	2	3	4	5	6	7
Mentors run the risk of being displaced by successful mentees.	1	2	3	4	5	6	7
Mentors can be betrayed by opportunistic mentees.	1	2	3	4	5	6	7
Members of the organisation often view mentors as playing favourites with mentee.	1	2	3	4	5	6	7
Mentors are often viewed by others as giving unfair advantages to their mentees.	1	2	3	4	5	6	7
Mentors run the risk of being viewed as developing a political cadre (circle or clique) with their mentees.	1	2	3	4	5	6	7
Choosing an underperforming mentee is a negative reflection on mentors' judgement.	1	2	3	4	5	6	7
An underperforming mentee can adversely affect a mentor's reputation.	1	2	3	4	5	6	7
Mentees can be a negative reflection of the mentor's competency.	1	2	3	4	5	6	7
The major drawback of being a mentor is the time commitment.	1	2	3	4	5	6	7
Mentoring is an energy draining process.	1	2	3	4	5	6	7

Part C: Negative mentoring experiences

The following items relate to the negative mentoring experiences. Reflecting on mentoring activities you have had with a colleague and/or supervisor, please indicate your level of agreement: 1 strongly disagree, 2 disagree, 3 neutral, 4 agree, and 5 strongly agree. Select the truest answer

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The personal values of my mentor are different from my own.	1	2	3	4	5
My mentor and I have different life priorities.	1	2	3	4	5
My mentor and I have different work habits.	1	2	3	4	5
My work strategies are different from my mentor's.	1	2	3	4	5
My mentor and I have a different understanding of effective work performance.	1	2	3	4	5
My mentor and I have different personal character.	1	2	3	4	5
Comparing myself to my mentor, I would say our temperaments (personalities) are different.	1	2	3	4	5
My mentor and I have dissimilar personalities.	1	2	3	4	5
My mentor and I are different from one another.	1	2	3	4	5
My mentor lacks expertise in areas that are important for the type of work he/she does.	1	2	3	4	5
I have any doubts about my mentor's job-related skills.	1	2	3	4	5
My mentor can't teach me anything I don't already know.	1	2	3	4	5
My mentor does not know much about the hospital system.	1	2	3	4	5
My mentor is not a high performer on the job.	1	2	3	4	5
My mentor lacks the interpersonal skills necessary to display show sensitivity when appropriate.	1	2	3	4	5

My mentor does not communicate well.

1

2

3

4

5

Part D: Relational Mentoring Index

The following items relate to the quality of your mentoring relationships. Reflecting on mentoring activities you have had with a colleague and/or supervisor such as teaching and learning, role modelling and psychosocial support. Please indicate your level of agreement with the questions: 1 completely disagree, 2 strongly disagree, 3 disagree, 4 neutral, 5 agree, 6 strongly agree and 7 completely agree.

	Completely disagree	Strongly disagree	Disagree	Neutral,	Agree	Strongly agree	Completely agree
My colleague/or supervisor is helping me learn and grow as a person.	1	2	3	4	5	6	7
My colleague/or supervisor helps me learn about my personal strengths and weaknesses.	1	2	3	4	5	6	7
My colleague/or supervisor helps me learn more about myself	1	2	3	4	5	6	7
My colleague/or supervisor has inspired or been a source of inspiration for me.	1	2	3	4	5	6	7
My colleague/or supervisor gives me a fresh perspective that helps me think "outside the box."	1	2	3	4	5	6	7
I am often inspired by my colleague/or supervisor.	1	2	3	4	5	6	7
My colleague/or supervisor is helping me become the person I aspire to be.	1	2	3	4	5	6	7
My colleague/or supervisor sees me not only for who I am now, but also for who I aspire to be.	1	2	3	4	5	6	7
My colleague/or supervisor always sees the best in me.	1	2	3	4	5	6	7
My colleague/or supervisor brings out the best in me.	1	2	3	4	5	6	7
My colleague/or supervisor accepts me for who I am.	1	2	3	4	5	6	7
I can be myself with my colleague/or supervisor.	1	2	3	4	5	6	7

In our relationship, we help each other without expecting repayment.	1	2	3	4	5	6	7
We never keep track of who gives and who gets in our relationship.	1	2	3	4	5	6	7
We give to each other without expecting repayment.	1	2	3	4	5	6	7
My colleague/or supervisor and I respect and influence each other.	1	2	3	4	5	6	7
We respect each other, and we value what each person has to say.	1	2	3	4	5	6	7
There is mutual respect and influence in our relationship.	1	2	3	4	5	6	7
Our relationship is founded on mutual trust and commitment.	1	2	3	4	5	6	7
My colleague/or supervisor and I trust each other, and we are committed to the relationship.	1	2	3	4	5	6	7
Trust and commitment are central to our relationship.	1	2	3	4	5	6	7

Part E: social exchange

The following items describe your orientation in interpersonal relationships at work. Please indicate your level of agreement with the statements on a scale: 1 completely disagree, 2 strongly disagree, 3 disagree, 4 neutral, 5 agree, 6 strongly agree and 7 completely agree.

	Completely disagree	Strongly disagree	Disagree	Neutral,	Agree	Strongly agree	Completely agree
I think kindness to others in the workplace will eventually come back to me in some way.	1	2	3	4	5	6	7
It is right to help others at work, as I will receive help from someone in the future.	1	2	3	4	5	6	7
My efforts for colleagues will be rewarded by someone at some point, if not immediately.	1	2	3	4	5	6	7
I am happy to do favors for others at work, as I will someday need a favor from someone.	1	2	3	4	5	6	7
When I receive support from a colleague, I should provide support to others in the workplace.	1	2	3	4	5	6	7

When a colleague in the workplace makes extra efforts for me, I often start thinking what I can do for others.	1	2	3	4	5	6	7
Receiving kindness from a colleague in the workplace makes me feel I should do something for others.	1	2	3	4	5	6	7
When I receive someone's favor at work, I want to repay the debt by doing a favor for others.	1	2	3	4	5	6	7
At work, I should be kind to those who are kind to others.	1	2	3	4	5	6	7
I believe those who often go the extra mile for others at work deserve my effort to help them.	1	2	3	4	5	6	7
When a colleague who often gives support to others is in trouble, I should do something for him/her.	1	2	3	4	5	6	7
When I find someone in the workplace helping others, I feel I should offer help when he/she needs.	1	2	3	4	5	6	7
At work, it generally pays to clarify rewards before making extra efforts for others.	1	2	3	4	5	6	7
If I do not ask for something in return before doing a task for others at work, I will be taken advantage of.	1	2	3	4	5	6	7
When I ask a colleague to help me with work, I should ask him/her what he/she wants in return.	1	2	3	4	5	6	7
I hesitate to ask colleagues to do something extra for me unless I can offer concrete benefits in exchange.	1	2	3	4	5	6	7
When I receive support from a colleague, I should remember to give something back to him/her.	1	2	3	4	5	6	7
If someone in the workplace does me a favor, I feel obliged to repay him/her in some way.	1	2	3	4	5	6	7
If someone does something for me, I feel the need to do something for him/her.	1	2	3	4	5	6	7
At work, I always repay someone who has done me a favor.	1	2	3	4	5	6	7

Part F: Perceived organisational support

The following items relate to the possible perceptions that nurses/midwives might have about the hospital for which they work. Considering your own feelings about your hospital in which you are working, please indicate your level of agreement with the statements: 1 completely disagree, 2 strongly disagree, 3 disagree, 4 neutral, 5 agree, 6 strongly agree and 7 completely agree.

Completely	Strongly	Disagree	Neutral,	Agree	Strongly	Completely
------------	----------	----------	----------	-------	----------	------------

	disagree	disagree				agree	agree
The organisation/hospital values my contribution to its well-being.	1	2	3	4	5	6	7
The organisation/hospital fails to appreciate any extra effort from me.	1	2	3	4	5	6	7
The organisation/hospital can ignore any complaint from me.	1	2	3	4	5	6	7
The organisation/hospital really cares about my well-being.	1	2	3	4	5	6	7
Even if I did the best job possible, the organisation/hospital would fail to notice.	1	2	3	4	5	6	7
The organisation/hospital cares about my general satisfaction at work.	1	2	3	4	5	6	7
The organisation/hospital shows very little concern for me.	1	2	3	4	5	6	7
The organisation/hospital takes pride in my accomplishments at work.	1	2	3	4	5	6	7

Part G: general self-efficacy

The following items are a reflection of how much you believe in yourself. Please indicate your agreement with the questions: 1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true

	Not at all true	Hardly true	Moderately true	Exactly true
I can always manage to solve difficult problems if I try hard enough.	1	2	3	4
If someone opposes me, I can find the means and ways to get what I want.	1	2	3	4
It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4
I am confident that I can deal efficiently with unexpected events.	1	2	3	4
Thanks to my resourcefulness, I know how to handle unforeseen situations.	1	2	3	4
I can solve most problems if I invest the necessary effort.	1	2	3	4
I can remain calm when facing difficulties because I rely on my coping abilities.	1	2	3	4
When I am confronted with a problem, I can usually find several solutions.	1	2	3	4
If I am face with a challenge, I can usually think of a solution.	1	2	3	4

I can usually handle whatever comes my way.

1

2

3

4

Would you like to be contacted for phase two of the study? (this question is different on-line survey and will not be linked to survey with data)

a. Yes

b. No

If yes, please provide contacts

Telephone number: _____

Confirm telephone number _____

Email address: _____

Confirm email address _____

Appendix 11: showing the I-CVI for each item and S-CVI for each scale.

SN	ITEM	I-CVI round one	I-CVI round two	Comments
Perceived cost of mentoring scale				
1	Mentoring takes more time than its worth	1.00		
2	Mentoring takes too much time away from one's own job	0.91		
3	Mentees can end up taking the mentor's job	1.00		
4	Mentors run the risk of being displaced by successful mentees	0.72	1.00	The item is similar to item 3 above
5	Mentors can be back stabbed by opportunistic mentees	0.82		
6	Members of the organisation often view mentors as playing favourites with mentee	0.82		
7	Mentors are often viewed by others as giving unfair advantages of their mentees	0.82		
8	Mentors run the risk of being viewed as developing a political cadre with their mentee	0.91		
9	Choosing a poor mentee is a negative reflection on mentors' judgement	0.54	1.00	"POOR" is a wrong word choice.
10	A poor mentee can ruin a mentor's reputation	0.63	1.00	"POOR" is a wrong word choice.
11	Mentees can be a negative reflection on the mentor's competency	0.82		
12	The major drawback of being a mentor is the time commitment	1.00		
13	Mentoring is an energy drain	1.00		
	S-CVI	0.85	0.93	
Negative mentoring experiences				
1	The personal values of my mentor are different from my own.	0.7	1.0	Not related to current study It's not standardised
2	My mentor and I have different life priorities.	0.9		
3	My mentor and I have different work habits.	1.0		
4	My work strategies are different from my mentor's.	0.89		
5	My mentor and I have a different understanding of effective work performance.	1.0		
6	My mentor and I have different personal dispositions dispositions character .	0.9		
7	Comparing myself to my mentor, I would say our temperaments (personalities) are different.	0.9		
8	My mentor and I have dissimilar personalities.	0.8		

SN	ITEM	I-CVI round one	I-CVI round two	Comments
9	My mentor and I are different from one another.	0.56	1.0	Similar to above items
10	My mentor lacks expertise in areas that are important for the type of work he/she does.	1.0		
11	I have my doubts about my mentor's job-related skills.	1.0		
12	My mentor can't teach me anything I don't already know.	1.0		
13	My mentor does not know much about the hospital system.	0.9		
14	My mentor is not a high performer on the job.	0.9		
15	My mentor lacks the interpersonal skills necessary to display show sensitivity when appropriate.	0.9		
16	My mentor does not communicate well.	1.0		
	S-CVI	0.89	0.94	
Relational Mentoring Index scale				
1	My partner is helping me learn and grow as a person	0.82		Partner was wrong word choice
2	My partner helps me learn about my personal strengths and weaknesses	0.91		
3	My partner helps me learn more about myself	0.82		
4	My partner has inspired or been a source of inspiration for me.	0.91		
5	My partner gives me a fresh perspective that helps me think "outside the box."	0.91		
6	I am often inspired by my partner.	0.91		
7	My partner is helping me become the person I aspire to be	0.91		
8	My partner sees me not only for who I am now, but also for who I aspire to be	0.82		
9	My partner always sees the best in me	0.91		
10	My partner seems to bring out the best in me	0.72	1.0	The item is similar to item 9 above
11	My partner accepts me for who I am	0.91		
12	I can be myself with my partner	0.82		
13	In our relationship, we help each other without expecting repayment	0.91		

SN	ITEM	I-CVI round one	I-CVI round two	Comments
14	We never keep score of who gives and who gets in our relationship	0.63	1.0	"KEEP SCORE", they propose use of a different word
15	We give to each other without expecting repayment	0.91		
16	My partner and I respect and influence each other	0.82		
17	We respect each other, and we value what each person has to say	0.82		
18	There is mutual respect and influence in our relationship	0.63	1.0	Item similar to item 17 above Respect and influence are two different concepts that should be separated
19	Our relationship is founded on mutual trust and commitment.	0.82		
20	My partner and I trust each other, and we are committed to the relationship	0.63	1.0	Item is similar to item 19 above
21	Trust and commitment are central to our relationship	0.82		
	S-CVI	0.83	0.893	

Appendix 12: The interview guides.

Interview guide

Interview number:

Date

Time

Length of interview

Introduction: researcher to review the vignette and ethical concerns,

1. Please tell me about yourself.

Gender

Qualification

Type of facility work for

Registration

Number of years worked as nurse

Previous experience in formal mentoring

Reflecting on a workplace relationship similar to the case of Asikidi and Kamuli (vignette):

Semi-structure questions for mentees:

1. Context of mentoring: From your experience, how would you define a mentoring?
 - What roles do mentors play?
2. Mentor identification: How did the mentoring relationship with your mentor start?
3. The mentoring relationship: please describe your relationship with the mentor?
 - How often do you meet?
 - What are/were your expectations of the mentor?
 - As a mentee, what is your role in the relationship
 - What mentoring activities have you engaged in with your mentor?
4. Mentor influence:
 - In what areas of your career has the mentor played
 - How has the mentoring relationship helped you adopt your practice in the hospital or in your new role?
 - How has the mentorship helped you socialise with other staff in the hospital?
 - How have your interactions with your mentor affected your confidence in your practice in the workplace? Please give some examples.
 - How has the mentoring relationship helped you cope with challenges in patient care in the clinical environment?
 - How has your experience in being mentored by others influenced your future decisions to mentor other nurses/midwives?
5. Factor for or against mentoring
 - What factors enabled you to learn most from your mentor in the workplace?
 - What factors hindered you from learning from your mentor in the workplace?
 - What benefits or advantages have you perceived based on your experience in being mentored in the workplace?
 - What costs or disadvantages have you perceived from your experience in being mentoring in in the workplace?
6. Are there any issues in relation to mentoring that you would like to talk about?
7. Concluding remarks by the interviewer

Semi-structure questions for mentors :

1. Context of mentoring: how would you define a mentoring?
 - What roles do mentors play?
 - Based on your experience, what capabilities do you believe that a mentor should have in order to successfully mentor other nurses in the workplace?
 - Based on your experience, what responsibility do you believe that a mentor needs to take in order to successfully mentor other nurses in the workplace?
2. Mentor identification: How did the mentoring relationship with your mentee start?
 - What attributes do you look for in a mentee
 - What motivated you to mentor other nurses in your workplace?
 - What activities have you initiated when you mentored other nurses? Please give some examples.
3. The mentoring relationship: how many people do you mentor? How often do you meet? How do you keep in touch? What mentoring activities have you engaged in?

4. Mentor influence: How have you built your confidence to be a mentor for other nurses in your workplace?
 - How has mentoring others affected your career in nursing?
5. Factor for or against mentoring: What factors enabled you to successfully mentor other nurses in the workplace?
 - What experiences hindered you from successfully mentoring other nurses in the workplace?
 - What characteristics of your current mentee that you wish they had?
 - What benefits or advantages have you perceived based on your experience in mentoring other nurses?
 - What costs or disadvantages have you perceived from your experience in mentoring other nurses?
 - How has your experience of mentoring others influenced your future decisions to mentor more nurses/midwives in future?
6. Are there any issues in relation to mentoring that you would like to talk about?
7. Closing remarks from the researcher.

Interview guide for executive nurse managers

Reflecting on a workplace relationship similar to the case of Asikidi and Kamuli (vignette):

1. How is mentoring defined/understood in the hospitals in Uganda?
 2. How is mentoring implemented among nurses in the hospitals? (MOH)
 3. What is expected of the mentor?
 4. What is expected of the mentee?
 5. How are mentors prepared for their roles?
 6. How are mentees prepared for their roles?
 7. What institutional resources are available for to foster positive experiences in mentoring in the workplace? How is the council/MOH supporting mentoring?
 8. What is your role in establishing and managing mentoring activities in your hospital?
 9. In what ways are mentors rewarded for their contribution?
 10. Are there any issues in relation to mentoring that you would like to talk about?
 11. Closing remarks from the researcher.
- Requesting for a copy of the following policies: vision, mission, strategic objectives, staff development policies, mentoring policy

Appendix 13: Research Ethics committee approvals for phase one.

Ethics approval: Phase two Flinders University Human Ethics

28 April 2022



HUMAN ETHICS LOW RISK PANEL APPROVAL NOTICE

Dear Ms Tracy Kakyio,

The below proposed project has been approved on the basis of the information contained in the application and its attachments.

Project No: 5313
Project Title: Mentoring experiences for nurses and midwives working in hospitals in Uganda
Primary Researcher: Ms Tracy Kakyio
Approval Date: 28/04/2022
Expiry Date: 31/05/2023

Conditions of Approval: Please ensure that all advertising materials include a statement noting that the project has been approved by Flinders University's Human Research Ethics Committee and the TASO Research Ethics Committee.

Please note: Due to the current COVID-19 situation, researchers are strongly advised to develop a research design that aligns with the University's COVID-19 research protocol involving human studies. Where possible, avoid face-to-face testing and consider rescheduling face-to-face testing or undertaking alternative distance/online data or interview collection means. For further information, please go to <https://staff.flinders.edu.au/coronavirus-information/research-updates>.

RESPONSIBILITIES OF RESEARCHERS AND SUPERVISORS

1. Participant Documentation

Please note that it is the responsibility of researchers and supervisors, in the case of student projects, to ensure that:

- all participant documents are checked for spelling, grammatical, numbering and formatting errors. The Committee does not accept any responsibility for the above mentioned errors.
- the Flinders University logo is included on all participant documentation (e.g., letters of Introduction, information Sheets, consent forms, debriefing information and questionnaires – with the exception of purchased research tools) and the current Flinders University letterhead is included in the header of all letters of introduction. The Flinders University international logo/letterhead should be used and documentation should contain international dialing codes for all telephone and fax numbers listed for all research to be conducted overseas.

2. Annual Progress / Final Reports

In order to comply with the monitoring requirements of the *National Statement on Ethical Conduct in Human Research 2007 (updated 2018)* an annual progress report must be submitted each year on the approval anniversary date for the duration of the ethics approval using the HREC Annual/Final Report Form available online via the ResearchNow Ethics & Biosafety system.


Please note that no data collection can be undertaken after the ethics approval expiry date listed at the top of this notice. If data is collected after expiry, it will not be covered in terms of ethics. It is the responsibility of the researcher to ensure that annual progress reports are submitted on time; and that no data is collected after ethics has expired.

If the project is completed before ethics approval has expired please ensure a final report is submitted immediately. If ethics approval for your project expires please either submit (1) a final report; or (2) an extension of time request (using the HREC Modification Form).

For student projects, the Low Risk Panel recommends that current ethics approval is maintained until a student's thesis has been submitted, assessed and finalised. This is to protect the student in the event that reviewers recommend that additional data be collected from participants.

3. Modifications to Project

Phase two: TASO Research Ethics Committee



**The AIDS Support Organisation
(TASO) Uganda Ltd.**

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25th May 2022

Our Ref: TASOREC/056/21-UG-REC-009 (AMEND)

Tracy Kakyo
Principal Investigator
tracy.kakyo@flinders.edu.au

Dear Tracy,

Re: APPROVAL OF AMENDMENTS TO RESEARCH PROTOCOL: "TO EXPLORE MENTORING PROCESSES FOR NURSES AND MIDWIVES WORKING IN HOSPITALS IN UGANDA"


Thank you for submitting a request for amendments to the protocol "To explore mentoring processes for nurses and midwives working in hospitals in Uganda version 2.0," dated March 2020 as follows;


1. A section on phase two design and methods has been added to the protocol to reflect this change. Since the method of data collection is different in the second phase.
2. The amendments are to reflect the new tools designed from phase one of the study and to show how these tools will be used to collect data for the next phase of the study.

Following a review of the amendments to your research protocol, the committee approved the submitted amendment. The approval covers the following attached documents.

1. The TASO REC Amendment/Modification request, dated, 06th April 2022.
2. The revised study protocol, version 2.0, March 2020.
3. Revised study instruments, version 1.0, May 2022.
4. Consent forms, version 2.0, May 2022.

We recommend that you proceed with submission of the amendments to the Uganda National Council of Science and Technology (UNCST).

Yours sincerely,

Dr. Adrian Jjuuko
Chairperson, TASO RESEARCH ETHICS COMMITTEE (REC)
CC: Executive Director, TASO (U) Limited
CC: Uganda National Council for Science & Technology (UNCST)


25 MAY 2022

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Email: mail@tasouganda.org

SOROTI REGIONAL PROJECT (SORP)
Soroti Hospital
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Email: Soroti@tasouganda.org

USAID LPS-ANKOLE PROJECT
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Fax: 0485.421323
Email: tasankole@tasouganda.org

TASO RHITE N. LANGO
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Appendix 13: an example of a transcript from the qualitative interviews.

Transcript

Gender: female

Qualification: diploma

Registration: nurse

Numbers of years working as a nurse/midwife: 28 years

Type of facility: government/public

Experience with Formal mentoring: No

I: from your experience what is mentoring?

P: to me, mentoring is trying to see somebody who is junior to you, who is coming newly to the field and has got little knowledge of the field but needs more education and guidance as he trains or after completing the trainings.

I: what is your role as a mentor?

P: my role as a mentor is to see that they are on the right track as they perform their duties. When they do procedures, I need to see that they follow the methods needed and they put the necessary inputs of the procedure they do and the end achieve the goal for which the procedure was done. We observe their contact with patients and relatives, we also see how they interact with other staff and how they talk to their elders let me say, visitors who are above them that have come to supervise and we also see how they handle patients.

I: what are the skills that a mentor requires to be able to do their role?

P: a mentor is supposed to be somebody who is skilled, a mentor is supposed to be someone who is knowledgeable in the area that the person is coming to be mentored, a mentor should have knowledge of how to give feedback, has to be kind, should have some experience before. Somebody who should be open, also has to be appreciative and say thank you for whatever the person does, should also be able to correct where the student goes wrong.

I: you talked of being skilled, can you explain that please?

P: when doing procedures they should always be with their students, so that the student can follow on the ward, allow the student to ask questions where she doesn't know.

I: you also talked of experience; how much experience is necessary?

P: someone should have experience of 2 or more years in the field of operation.

I: you also talked of being kind and appreciative, can you explain that please?

P: because if you are so arrogant, a student will always be fearing, you should know that this is a human being that simply wants to learn. So that they don't fear when they want to do something, so that you will also get the gaps in their works. But if you are arrogant and cruel, people will tend to run from you and they will always be fearing when you are around, they won't be free with you around to perform their duties.

I: what is the role of the mentees?

P: when mentoring, you feel the person who is coming to be mentored to get whatever they have come to do. If you lacked the experience with this unit, when you are going out you should know the key thing the unit does. You should get that knowledge rather than going out the way you came. Like here on the TB treatment, somebody should be able to define TB, how it's got, the management and complications. So that experience should go out with it.

The social interactions, whether he is a [inaudible] or not those we need to see whether he is somebody who does not understand patients, those are the things we observe on them. The personal, the social leaving alone the economical bit because we are not always the same we take them as they are.

I: how many mentees do you have?

P: I have to many, from the schools they come time to time, now they are not here because they are running exams. Since they started this school we were in the school people mentored us our fellows have come in, they are really very many.

I: have you had mentees that are junior but not students?

P: so many [provides names]

I: what activities do you organise with the junior nurses?

P: when we go with them when we do outreaches, when we go to teach the community about how TB is contracted so that they can do the controls. (omitted text as it irrelevant to topic)

I: what motivates you to mentor junior nurses?

P: If I had not been mentored I would not be what I am, I feel the knowledge should always go on to the young generation who are interested in the field so that once we are go be they replace us and help the sick. Because our main core here is to make the patients who are sick to recover. That's the main reason I mentor.

I: how do you identify your mentees?

P: most of these students, they are located by their schools or institutions to come get experience in these units. I feel its my role to see that the student in my unit is mentored.

I: how has mentoring affected your confidence?

P: you know mentoring, I may be somebody who knows many things, but since medicine keeps changing; there are new things they learn from their institution they sometimes mentor me too. I have got a way of interacting and two-way. I learn from them and they learn from me.

I: has mentoring had impact on your career?

P: it's a positive effect actually, with my mentorship, you know I started as a nursing aide then from there I went for enrolment. When I was more exposed to this work with those experiences, nursing now remained conc in my mind when I went for interviews, I was taken for diploma. If circumstance allowed with this experience if I was not tied down now I would be somewhere.

I: what was your motivation to go back to school and upgrade?

P: me personally I feel there are many things in this area of nursing that I have missed. Sometimes I feel they are up there, if I had a chance to reach for higher studies that's where I would get them, I personally I have not done even management, I wish I went for those things maybe I would get a better scale. Sometimes what I do I underate myself, I say if I had this [inaudible word] may be I would be here.

I: what structures are in place that enable mentoring.

P: may be accepting that you people [students] you can come and have your experiences in this hospital. The financial enabling I don't know if it is being done or not because am not in that rank I share the financial pieces. But I think initially it was there but it stopped due to complaints. I think the institution is enabling by receiving the students.

I: what is it the hospital can support mentoring?

P: I would request them to put whatever the equipment needed in every unit to be in position so that the performance is better so that the students can learn that these procedures use this equipment. Because most of the times we just gamble and improvise for the work to go on. If the equip were available as needed it would enable these students to learn better.

The knowledge, the knowledge if all the nurses who are doing mentoring were at the level of degree or had management because these people are coming to be managed, if they all had basic management skills it would be better.

May be the tools, they would put tools in place needed, the aids, the learning aid would be displayed. Even mere thanks, you people have been doing this and that in this unit and its great, that will motivate people. Or even give financial support, who doesn't need money, every body needs money

I: what benefits do you get from mentoring others?

P: like I said it makes to have nursing at finger tips and keep it in my mind, I don't lose it two, the knowledge shared is going to help Ugandans else where the mentees go. [through the mentees you have helped people you have never met through the mentee].

P: sometimes due to the workload, sometimes what you do in terms of mentoring is just elementary you don't go in details of mentorship because you can base yourself fully attending to someone doing procedures, sometimes you say go do that while I do this. You let the person do procedure in your absence while for you you do something else. You feel you have not given enough time for such a person to realise gaps, someone can go do shortcuts and in the end you end up losing, you don't observe, you don't know whether you did it rightly.

At times hunger, most of the things we do on empty stomach, when you are hungry you cant be productive, you postpone lets do tomorrow, or you tell them 'go and do it' while for you, you are keeping yourself here.

I: what's causing the hunger?

P: we walk with empty pockets; the salary is not enough. This little salary it goes for other things.

I: how is your experience dealing with different generations in mentoring?

P: that's another challenge, we feel these people coming to the field they are not getting the teachings we got from their tutors; you know also the tutors are dot com generation. Or it is a personal feeling that I cannot work thoroughly. Most times when mentoring you realise there are many gaps from these students, somebody is about to finish school, but they are going out raw; you don't have the basics in nursing. And its like they came to nursing as last resort they are not called as our ethics says. It is a call, when you are nurse but most of them came as a last resort. They wanted to be people higher than nurses but since they didn't get the chance they came to nursing with less interest in nursing, that is our challenge, its very dangerous. We are scared of the future once we are retired we don't know what the service will be in the future.

I: how can improve this attitude as mentors?

P: that is actually something which could be done by ministry of education, by doing supervision of the tutors in the institutions, what knowledge they are giving to the students. Regular instructions should be done for the teachers. For something which is inborn for these students its very hard, apart from them realising I have been called.

I: what is your experience with mentoring different genders?

P: in my experience there are males better than women, sometimes I realise the call for nurses in males than the females, may be the females think they will have support from boyfriends. the males say this is my future where I base my family on, they feel they should grab every opportunity to learn so that when they go out ready so that if a work opportunity comes they can grab it. While for females they somebody somewhere is reading for me, even if I lose this nursing or don't get it much I will get support from the other part.

I: we have covered most of the questions did you have anything to add regarding mentoring?

P: not really,

I: thank you for sharing your experiences

P: you are welcome

Appendix 14: the plagiarism report

Tracy Thesis

ORIGINALITY REPORT

15%	10%	10%	8%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Flinders University Student Paper	5%
2	flex.flinders.edu.au Internet Source	1%
3	etheses.lse.ac.uk Internet Source	<1%

Appendix 15: the consent forms

Consent form used in the phase one study.

CONSENT FORM

Consent Statement

By deciding to complete this online survey, I am indicating that:

- ☐ I have read and understood the information about the research, and I understand I am being asked to provide informed consent to participate in this research study. I understand that I can contact the research team if I have further questions about this research study.
- ☐ I am not aware of any condition that would prevent my participation, and I agree to participate in this project.
- ☐ I understand that I am free to withdraw at any time during the study.
- ☐ I understand that I can contact Flinders University's Research Ethics & Compliance Office if I have any complaints or reservations about the ethical conduct of this study.
- ☐ I understand that my involvement is confidential, and that the information collected may be published. I understand that I will not be identified in any research products.
- ☐ completing a questionnaire
- ☐ sharing my de-identified data with other researchers
- ☐ I consent to all the above.

Consent form used in the phase two study.

CONSENT FORM

Consent Statement

By deciding to complete this online survey, I am indicating that:

- ☐ I have read and understood the information about the research, and I understand I am being asked to provide informed consent to participate in this research study. I understand that I can contact the research team if I have further questions about this research study.
- ☐ I am not aware of any condition that would prevent my participation, and I agree to participate in this project.
- ☐ I understand that I am free to withdraw at any time during the study.
- ☐ I understand that I can contact Flinders University's Research Ethics & Compliance Office if I have any complaints or reservations about the ethical conduct of this study.
- ☐ I understand that my involvement is confidential, and that the information collected may be published. I understand that I will not be identified in any research products.
- ☐ I consent to all the above.

I further consent to:

- ☐ participating in an interview
- ☐ having my information audio recorded
- ☐ my data and information being used in this project and other related projects for an extended period of time (no more than 10 years after publication of the data)

Participant

Sign: _____

Name: _____

Date: _____