
**DETERMINING LEARNER NURSES' PERCEIVED LEVELS OF
COMPETENCE AND WILLINGNESS TO PRACTISE IN A MATERNITY
UNIT AT A UNIVERSITY IN THE WESTERN CAPE PROVINCE**

**Mini-thesis presented for the Degree of Masters in Advanced
Midwifery and Neonatology**

UNIVERSITY OF THE WESTERN CAPE



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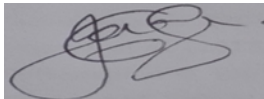
DECEMBER 2017

DECLARATION

I declare that the mini-thesis entitled “Determining learner nurses’ perceived levels of competence and willingness to practise in a maternity unit at a university in the Western Cape Province” is my own and does not involve plagiarism or teamwork. It has not been submitted for any degree or examination to any other university, and all sources I have used and quoted have been indicated and acknowledged through complete referencing.

I understand that this declaration covers the mini-thesis submitted.

Signature:



Charlene Isaacs



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Firstly, thank you to the Man above for giving me the strength to complete my mini-thesis. Thank you to all my family, friends and colleagues who have supported me throughout my journey. Without your support I would not have made it.

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ABSTRACT

Determining learner nurses' perceived levels of competence and willingness to practise in a maternity unit at a university in the Western Cape Province

Midwifery is a health profession where a qualified midwife provides care to a woman during her pregnancy, labour and the postnatal period. Apart from taking care of the mother, the midwife is expected to take care of the new-born baby as well until the health of mother and baby is in a satisfactory condition which will allow them to be discharged from the midwife's care.

The purpose of the study was to determine the perceived levels of competence and willingness of learner nurses to practise in a maternity unit after completion of the midwifery component of the undergraduate curriculum at a university in the Western Cape. The current study provides nursing institutions with an opportunity to review the content of the midwifery curriculum in order to prepare learner nurses adequately to practise after graduation and, thus, facilitate the provision of improved maternal care and childcare.

A descriptive research design was used to determine the perceived levels of competence and willingness to practise in a maternity unit of final-year undergraduate learner nurses. Pre-testing was conducted prior to the collection of data to measure the reliability and validity of the adapted, structured questionnaire. All-inclusive sampling (n=247) was used, which included all learner nurses registered as 4th year undergraduate learner nurses at this institution during the time of data collection.

Data was collected by means of an adapted questionnaire which included closed-ended questions and one open-ended question. Three themes were identified: Positive views; Negative views; and Competences in midwifery practice areas. The collected data was cleaned, and entered into and analysed using SPSS v24. The Cronbach's alpha score

calculated for the competence levels of respondents were 0.82%, while the section on willingness to practise scored 0.95%.

The findings of the study revealed that learner nurses perceive themselves competent while performing basic obstetric procedures in low-risks areas. However, the learner nurses perceive themselves to have low competence levels when they have to perform more complicated obstetric procedures. The results also show that learner nurses need more time in high-risk areas to increase their perceived competence levels. Furthermore, the results show that learner nurses are very willing to perform these procedures once they are qualified midwives.



KEY WORDS

- Midwifery
- Students
- Preparedness
- Perceive
- Competence
- Registered Nurses



OPERATIONAL DEFINITIONS

Terminology	Definition
Learner nurses	Undergraduate 4 th nursing students that have completed the midwifery component of the R425 course at a university.
Midwife	Nurse who is trained and skilled and have successfully completed a midwifery education programme, and who holds such registration with SANC (that is recognised in the country where it is allocated).
Maternity unit	The workplace where care is provided to pregnant women during the antenatal period, labour, and throughout the postnatal period by a registered midwife.
Willingness	Refers to learner nurses being prepared to practise in midwifery practice areas after completion of their four-year programme.
Competence	The learner nurse's level of knowledge and skills to perform procedures, and attitude towards performing such procedures.
Graduates	A learner nurse who have completed a nursing degree.
Perception	Learner nurses' belief about their ability to practise as competent midwives.
Nursing	A job whereby an educated person trained to care for the sick.
Midwifery	Professional practice of a trained and registered midwife.

ACRONYMS

CTG	Cardiotocograph
ICM	International Council of Midwives
HIV	Human immunodeficiency virus
NCSBN	National Council of States Boards of Nursing
MOU	Maternity Obstetric Unit
MDGs	Millennium Development Goals
PPH	Post-partum Haemorrhage
PMTCT	Prevention of mother-to-child transmission
SANC	South African Nursing Council
WHO	World Health Organization
UNICEF	United Nations International Children's Emergency Fund
UWC	University of the Western Cape



LIST OF TABLES AND FIGURES

Table 3.1	Table showing content validity
Figure 4.1	Ages of respondents
Table 4.1	Gender
Table 4.2	Marital status
Table 4.3	Educational qualifications
Table 4.4	Planning to work in maternity
Table 4.5	Practical hours owed
Table 4.6	Outstanding hours
Table 4.7	Themes
Table 4.8	Perceived competence
Table 4.9	Perceived willingness
Table 4.10	Overall competence and willingness
Table 4.11	Readiness to work in maternity practice areas



LIST OF ANNEXURES

Annexure 1: Information sheet

Annexure 2: Consent form

Annexure 3: Ethical clearance

Annexure 4: Permission to conduct study at UWC

Annexure 5: Questionnaire

Annexure 6: Permission to use and adapt questionnaire

Annexure 7: Coding of open-ended question

Annexure 8: Editorial report



Table of contents

Declaration.....	i
Acknowledgements.....	ii
Abstract.....	iii-iv
Keywords.....	v
Operational definitions.....	vi
List of abbreviations.....	vii
List of tables and figures.....	viii
List of annexures.....	ix
CHAPTER 1	ORIENTATION TO THE STUDY.....1-8
1.1	Introduction.....1
1.2	Background.....2-4
1.3	Problem statement.....4-5
1.4	Significance of the study.....5
1.5	Aim of study.....5
1.6	Objectives.....5
1.7	Research method
1.7.1	Approach and study design.....6
1.7.2	Data collection instrument.....6
1.7.3	Data analysis.....7
1.7.4	Pre-testing.....7
1.8	Ethics statement.....7-8
1.9	Limitations of study.....8
CHAPTER 2	LITERATURE REVIEW 9-20
2.1	Introduction.....9-10
2.2	Training of midwives.....10
2.2.1	Midwifery education.....10-11
2.2.2	Midwifery programmes offered in selected countries.....11-12
2.2.3	Pre-registration programmes for midwives.....12-13
2.2.4	Perceptions of the transitioning programme.....13-14

2.3	Preparedness to practise of undergraduate student nurses and midwives...	14-15
2.4	Competence levels of undergraduate student nurses and midwives.....	16-17
2.5	Midwifery learner nurses' perceptions and experiences regarding clinical tasks.....	17-18
2.6	Perceptions and experiences of undergraduate nursing and midwifery learner nurses.....	18-20
2.7	Conclusion.....	20

CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY..... 21-33

3.1	Introduction.....	21
3.2	Research approach.....	21
3.2.1	Research design.....	22
3.3	Research methodology.....	22
3.3.1	Objectives.....	22-23
3.4	Setting.....	23
3.5	Study population.....	23
3.6	Sampling.....	24
3.6.1	All-inclusive sampling.....	24
3.6.1.1	Inclusion.....	24
3.6.1.2	Exclusion.....	25
3.7	Data collection instrument.....	25
3.7.1	The Questionnaire.....	25
3.7.1.1	Section A: Demographic data.....	25
3.7.1.2	Section B: Midwifery.....	25
3.7.1.3	Section C: Likert scale regarding perceived levels of competence and willingness to practise.....	26
3.7.1.4	Section D: Readiness to work in maternity practice areas.....	26
3.8	Data collection.....	26-27
3.9	Data analysis.....	27-28
3.10	Validity and reliability of the instrument.....	28
3.10.1	Validity.....	28
3.10.1.1	Construct validity.....	28
3.10.1.2	Face validity.....	29

3.10.1.3	Content validity.....	29
3.10.2	Reliability.....	30
3.11	Pre-testing of instrument.....	30
3.12	Ethics statement.....	31
3.12.1	Permission.....	31
3.12.2	Right to self-determination.....	31
3.12.3	Informed consent.....	32
3.12.4	Right to privacy.....	32
3.12.5	Right to confidentiality.....	32-33
3.12.6	Right to fair treatment.....	33
3.12.7	Right to beneficence.....	33
3.13	Limitations of the study.....	33

CHAPTER 4 FINDINGS AND LIMITATIONS.....34-56

4.1	Introduction.....	34
4.2	Results of the reliability analysis of instrument.....	35
4.3	Response rate.....	35
4.4	Section A: Demographic data.....	35-37
4.4.1	Age.....	35
4.4.2	Gender.....	36
4.4.3	Marital status.....	36-37
4.4.4	Educational qualifications.....	38
4.5	Section B: Determine whether respondents want to work in midwifery units after graduation and the hours still owed by respondents.....	38-39
4.6	Section C: Coding of open-ended.....	39-44
4.6.1	Themes.....	40
4.6.1.1	Positive views.....	40-42
4.6.1.2	Negative views.....	42
4.6.1.3	Competences in midwifery practice area.....	43-44
4.7	Section D: Perceived competence and willingness levels of the respondents..	45-53
4.7.1	Perceived competence procedures.....	45-46
4.7.1.1	Procedure: vaginal examination, pelvic assessment and starting intravenous infusion.....	46

4.7.1.2	Procedure: monitoring and interpreting of CTG.....	46-47
4.7.1.3	Procedure: performing an episiotomy and suturing the perineum.....	47
4.7.1.4	Procedure: performing a delivery, delivering a breech and shoulder dystocia.....	47-48
4.7.1.5	Procedure: management of PPH and pre-eclampsia.....	48
4.7.1.6	Procedure: neonatal resuscitation.....	48
4.7.1.7	Procedure: counselling HIV-positive mothers.....	48-49
4.7.2	Perceived willingness procedures.....	49
4.7.2.1	Procedure: vaginal examination, pelvic assessment and starting intravenous infusion.....	49-50
4.7.2.2	Procedure: monitoring and interpreting of CTG.....	50
4.7.2.3	Procedure: performing an episiotomy and suturing the perineum....	50-51
4.7.2.4	Procedure: performing a delivery, delivering a breech and shoulder dystocia.....	51
4.7.2.5	Procedure: management of PPH and pre-eclampsia.....	51-52
4.7.2.6	Procedure: neonatal resuscitation.....	52
4.7.2.7	Procedure: counselling HIV-positive mothers.....	52
4.8	Section E: Whether or not the respondents perceive themselves ready to work in certain practical wards after graduation as a midwife.....	53-56
4.8.1	Antenatal and postnatal ward and theatre.....	53-54
4.8.2	Labour ward and nursery.....	54
4.8.3	Postnatal clinic, MOU and antenatal clinic.....	54-55
4.8.4	Secondary (low-risk) and tertiary (high-risk) hospital.....	55
4.9	Limitations.....	55
4.10	Conclusion.....	55-56

CHAPTER 5 DISCUSSION OF FINDINGS, RECOMMENDATIONS AND CONCLUSION.....57-68

5.1	Introduction.....	57
5.2	Aim of the study.....	57
5.3	Objectives.....	57
5.4	Demographic data – Section A	
5.4.1	Age.....	57

5.4.2	Gender.....	58
5.4.3	Marital status.....	58-59
5.4.4	Educational qualifications.....	59
5.5	Intention to practise as a midwife.....	59
5.6	Outstanding midwifery practical hours.....	60
5.7	Perceived competence and willingness procedures.....	60
5.7.1	Procedure: vaginal examination and pelvic assessment.....	61
5.7.2	Procedure: monitoring and interpreting of CTG.....	61-62
5.7.3	Procedure: performing an episiotomy and suturing the perineum.....	62-63
5.7.4	Procedure: management of PPH and pre-eclampsia.....	63-64
5.7.5	Procedure: neonatal resuscitation.....	64
5.7.6	Procedure: counselling HIV-positive mothers.....	64-65
5.8	Maternity practice areas.....	65
5.8.1	Low-risk practical areas.....	64-65
5.8.2	Theatre.....	65-66
5.8.3	High-risk areas.....	66
5.9	Conclusion.....	66-67
5.10	Recommendation.....	68
5.10.1	Further research.....	68
5.10.2	Training programmes.....	68
	References.....	69-73
	Annexures.....	74-87

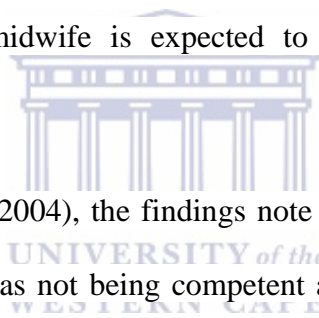


CHAPTER 1

ORIENTATION TO THE STUDY

1.1 Introduction

Nurses are the anchors of the multi-disciplinary team. They can be described as the heart of the health care system. The nurse is often the first member of the team who the patient comes into contact with and trusts the most. Investigating the competence levels and willingness to practise of nurses and midwives plays a vital part in the patient's life since the care they provide is a result their training. Most institutions and organisations aim at producing competent nurses and midwives as soon as the learner nurses graduate. Soon after graduation the newly qualified nurse or midwife is expected to practise independently and with confidence.



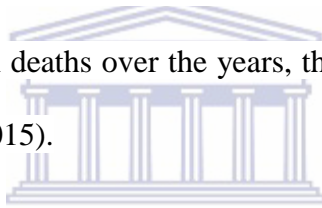
In a study done by Moeti et al. (2004), the findings note that, in South Africa, experienced nurses perceive newly graduates as not being competent after successfully completing their undergraduate training programme. When reviewing the literature in Chapter 3, similarly to Moeti et al. (2004), the findings note that undergraduate learner nurses are not prepared or fit for practice soon after graduation. In an attempt to close the gap between university training and practice, transitioning programmes have been initiated in certain countries. Despite the fact that these transitioning programmes are in place to prepare graduates for practice, they are not mandatory in most countries.

In South Africa, however, the transitioning programme is mandatory before registration as a nurse or midwife occurs, but in countries like the United Kingdom and Australia the programme is not mandatory. The current study was done to look at the perceived levels of

competence and willingness to practise of 4th year learner nurses in a maternity unit at a university in the Western Cape Province.

1.2 Background

Two of the Millennium Development Goals (MDGs) relate to the practise of midwifery globally. MDG 4 is directed at reducing the mortality rate in children, while MDG 5 is aimed at increasing maternal health. For children under the age of five years, the mortality rate has decreased by more than half over the years. Between 1990 and 2015, it has been reduced from 90 to 43 deaths per 1000 live births. Although there has been an increase in the population growth of developing countries over the years, the number of deaths in children under the age of five has dropped from 12.7 million in 1990 to nearly 6 million in 2015 worldwide. Despite the decline in deaths over the years, the mortality rate among children is still very high (United Nations, 2015).



According to the United Nations International Children's Emergency Fund (UNICEF), neonatal mortality accounts for nearly 40% of the estimated 9.7 million deaths of children under the age of five years and for nearly 60% of child deaths under the age of one. This means these children are 500 times more likely to die in the first day of life than at one month of age (United Nations International Children's Emergency Fund, 2012).

Maternal mortality worldwide is excessively high as well with approximately 830 women dying from childbirth and pregnancy-related complications. Virtually most of these deaths occurred in low-resource settings that could have been prevented (World Health Organization, 2016). Looking at maternal health globally, an estimated 289 000 women died during pregnancy and childbirth in 2013, a decline of 45% from levels in 1990. Most of the maternal and child deaths occur due to mothers and children having no access to skilled routine and emergency care from trained midwives (World Health Organization, 2015).

In South Africa, every year – due to complications during pregnancy and childbirth – 4 300 mothers are dying, and 20 000 babies are stillborn and another 23 000 are dying during their first month of life. In total, 75000 children do not make it to celebrate their fifth birthday (United Nations International Children's Emergency Fund, 2012).

Midwifery refers to care given to women during pregnancy, labour, and the postpartum period, including the care provided to their new-born babies. The care that midwives provide on a daily basis is aimed at preventing any health-related complications during pregnancy, detecting any unforeseen abnormalities that may occur, and providing medical assistance to pregnant women when necessary (World Health Organization, 2015). Global standards, tools, and competences provide guidelines to ensure that midwives globally have effective education and regulations (International Confederation of Midwives, 2014).

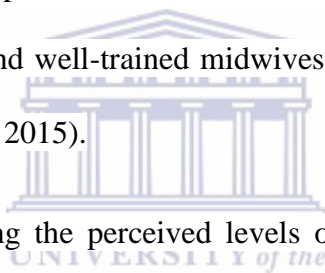
Midwives are responsible for diagnosing and monitoring pregnancies, labour, and postpartum progress, and for working with child-bearing women and other members of multidisciplinary teams to achieve the best possible outcomes for individual families (Fraser & Cooper, 2009). To safeguard the health of the mother and the child, the South African Nursing Council (SANC) has prescribed certain standards for the educational and training programmes at approved nursing institutions that lead to eligibility for registration as a midwife with SANC.

In order to become a midwife and receive a bachelor's degree in nursing and midwifery in South Africa, one has to complete the R425 course, which is a four-year degree programme provided by several universities throughout South Africa. On successful completion of the 1000 clinical hours, the graduates can register for and obtain their practising licence at SANC as a Professional Nurse and Midwife (South African Nursing Council, 2016a).

The aim of the course is to ensure that graduates have a wide range of skills, knowledge and attitudes that will allow them to make meaningful and sustained contributions to the health

care system after graduation. The minimum requirements prescribed by SANC for registering as a midwife according to R425 is to developed competence in midwifery. In this regard, the minimum practical requirements are that the learner nurses have to examine at least 30 pregnant women under supervision, witness 5 deliveries under supervision, personally deliver 15 babies, perform 15 internal examinations, guide antenatal and postnatal exercises, perform episiotomies, and suture a first, second or third-degree tear of the perineum (South African Nursing Council, 2016c) .

One of the four key actions identified by the World Health Organization is the need for more midwives to be educated in line with international standards in order to provide quality midwifery services which could prevent about two-thirds of women and new-born deaths globally. Investing in educated and well-trained midwives could save millions of lives each year (World Health Organization, 2015).



The study focuses on determining the perceived levels of competence and willingness of learner nurses to practise in a maternity unit at a university in the Western Cape Province.

1.3 Problem statement

According to the World Health Organization (2015), most mothers and new-born babies die as a result of preventable complications during pregnancy, labour and the postnatal period, and competent, trained nurses would decrease the risk of dying during childbirth.

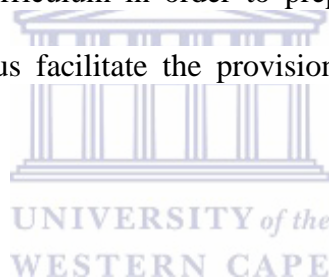
A study done by Seada and El Hanafy (2012) reveal that the majority of baccalaureate nursing graduates report that among the experiences that hinder their learning are feelings of inadequacies, fear, and making errors. Furthermore, a study by Waterson, Qupe, Maritz, Manning, Makobe, & Chabeli (2006) reveals that newly qualified nurses are not competent in

knowledge of diagnosing, in planning, and in skills for implementation, but are fairly competent in the assessment of patients.

There is a greater need to determine the perceived levels of competence and willingness of learner nurses to practise in a midwifery unit after graduation. These learner nurses are the future health care providers who will be entrusted with the responsibilities of ensuring better health care to women and children.

1.4 Significance of the study

The findings from this study can provide nursing institutions with an opportunity to review the content of the midwifery curriculum in order to prepare learner nurses adequately to practise after graduation and thus facilitate the provision of improved maternal care and childcare.



1.5 Aim of the study

The aim of the study is to determine learner nurses' perceived levels of competence and willingness to practise in a maternity unit at a university in the Western Cape Province.

1.6 Objectives

1. To determine learner nurses' perceived levels of competence in key procedures in midwifery in the Western Cape Province.
2. To determine the perceived willingness of learner nurses to practise in a midwifery unit in the Western Cape Province.



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1.7 Research method

1.7.1 Approach and study design

A quantitative approach was adopted and a survey was used to gather detailed descriptions of existing variables to assess the existing conditions and practices which could assist in the improvement of midwifery practices (Burns & Grove, 2005). Quantitative approach was appropriated as the study was addressing the perception of the 4th year learner nurses. The design of the study is the blueprint for conducting a study that maximizes control over issues that could affect the validity of the findings (Grove, Burns and Gray, 2012).

1.7.2 Data collection instrument

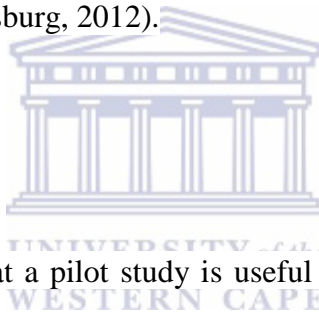
A questionnaire refers to a self-report form that is designed to collect information which can be obtained through written responses from the subject (Grove et al., 2012). The study used an adapted, structured questionnaire, which was developed by an academic specialising in Midwifery, as the research setting. The number of questions in the original questionnaire was reduced to cover the minimum requirements of SANC. Written permission was obtained from the developer of the questionnaire to adapt and use the questionnaire for the current study. The adapted questionnaire was used to answer the objectives that were formulated. The Likert scale was used to record data from the questionnaires, and included five response categories. Each one of the categories was allocated a value which ranged from 1 as the most negative response to a value of 5 as the most positive response (Grove et al., 2012). The adapted questionnaire had four sections focusing on different aspects. Section A included the demographic information of the learner nurses, and Section B focused on exploring whether learner nurses plan to work in midwifery units after graduation and whether they have any outstanding clinical hours. Section C focused on the 4th learner nurses' perceived levels of

competence in clinical skills for midwifery practice areas, while Section D looked at their willingness to practise in different maternity practice areas.

1.7.3 Data analysis

The collected data was cleaned, and entered into and analysed using SPSS v24. The categorised data collected was presented in a frequency table so that the outcome of the investigation can be seen according to these categories. The Likert scale data was recorded according to five response categories.

Measures of central tendency are statistics or numbers stating the most typical or average scores in a distribution. The measures of central tendency are the mean, mode and median (Brink, Van der Walt & Van Rensburg, 2012).



1.7.4 Pre-testing

Burns and Grove (2010) note that a pilot study is useful for determining whether there are any problems with the research design of the instrument, and to look at the reliability and validity of the research instruments. In this study, the pre-testing of the instrument was conducted with 10 volunteers who were suitable and fitted into the inclusion criteria of the sample, and their feedback was used to adapt the questionnaire.

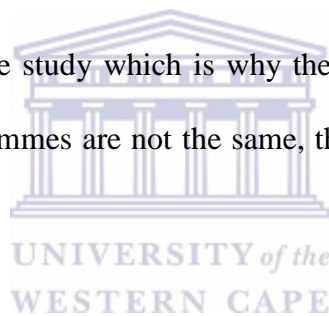
1.8 Ethics statement

In order to conduct the study, permission was obtained from the Higher Degree and the Research Ethics Committee of the Faculty of Community and Health Science at UWC. Permission was requested in writing from the Head of Department and the Registrar at UWC. According to Brink et al, (2012) it is the responsibility of the researcher to be ethical when

conducting research as well as when reporting that research. The researcher has to demonstrate respect for the scientific community by protecting the integrity of the scientific knowledge and taking into consideration the consequences of the research for the society. Brink et al, (2012) further states that researchers have to be competent, accurate and honest in everything they do. Overall, the researcher needs to protect the rights of all human beings involved and must know that they have an ethical responsibility towards that human beings involved (Brink et al, 2012). The ethical statement is discussed in detail in Chapter 3 of the study.

1.9 Limitations of the study

The current study is a descriptive study which is why the findings cannot be generalised – since the structures of the programmes are not the same, the outcomes of the findings might vary for different programmes.



CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

A literature review is done before, during and after the research to build on existing literature, prevent duplication of existing literature, and compare the findings of the current study to existing literature (Brink et al., 2012). The purpose is to assist the researcher to compile a written report based on the literature found. This will help the researcher to draw conclusions about and gain more insight into the published literature on the above-mentioned topic (Brink et al., 2012).

As noted in the previous chapter, the aim of the study is to determine the learner nurses' perceived levels of competence and willingness to practise in a maternity unit. In this chapter, I will discuss the training of midwives, undergraduate learner nurses' views on their preparedness for practice, the perceptions and experiences of undergraduate nursing and midwifery learner nurses, and the midwifery learner nurses' perceptions and experiences during their clinical settings.

The University of the Western Cape library services was one of the services used in the process of identifying literature on the topic. In this regard, the databases used were: Cumulative Index Nursing and Allied Health Literature (CINAHL); Medknow Publications; Medline; Research Gate; BioMed Central; Science Direct; Sciedu; Google; and Google Scholar. In search of the relevant articles, a combination of the following key terms and phrases was used: midwife; willingness (preparedness); competence levels of undergraduate nurses and midwives; midwifery; clinical assessment of student midwives; transitioning of

newly graduates; experiences and perceptions of undergraduate nursing and midwifery learner nurses; education in midwifery; preceptorship; and midwifery programmes.

2.2 Training of midwives

2.2.1 Midwifery education

Nursing and midwifery education have advanced over the years and are more guided by evidence-based practice. The aim of the midwifery training programme is to prepare learner nurses to be skilled and competent professionals (World Health Organization, 2009). These professionals will be needed to strengthen the health care systems, meet the needs of the population, and protect the public. It is of importance that high quality education programmes are in place to meet global standards. Therefore, it is imperative that new graduates should demonstrate established competences in nursing and midwifery when they are in practice (World Health Organization, 2009). The International Confederation of Midwives (ICM) has global standards for midwifery education, which were amended in 2013. These guidelines are available to countries and regions and help to set the benchmarks for preparing midwives that are based on global norms. The purpose of these guidelines is to prepare qualified midwives to meet the health needs of the populations in the practising countries, particularly with regard to women and childbearing families. The goal is to ensure that student midwives are competent before being registered as midwives. Once qualified, the skilled and competent midwives can help to reduce the maternal and child mortality rates (ICM, 2014).

In 2015, the United Nations discussed the Millennium Developmental Goals (MDGs) and reported that the maternal and child mortality rates have decreased but not as expected (United Nations, 2015). Although there was a decline in the maternal and child mortality rates, the targets were not reached. From 1990–2015, the child mortality rate dropped from

90 to 43 deaths per 1000 live births. The maternal mortality rate dropped by 45% worldwide (United Nations, 2015). Much work still needs to be done to achieve the new goals set for the next 15 years. The new goals consist of 17 Sustainable Development Goals (SDGs) that should be reached by 2030. Nursing and midwifery councils worldwide have to ensure that their training programmes produce well-trained, qualified nurses and midwives. This will further help decrease the maternal and child mortality rates by 2030.

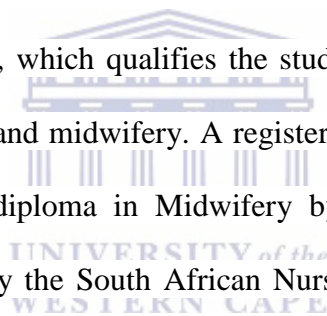
Each country has its own council which serves as the regulatory body for nursing and midwifery education. The purpose of these councils is to produce qualified, skilled nurses and midwives, to protect the public from harm, and to set the standards for the education and training of nurses and midwives (NMC, 2009). The South African Nursing Council (SANC), established by the Nursing Act 45 of 1944, is the regulatory body which guides nursing and midwifery education in South Africa. Nursing and midwifery education is further regulated by the Nursing Act 33 of 2005. SANC sets and maintains the standards for education and practice of nursing in the country as well as the minimum standards required for nurses and midwifery training programmes to which institutions need to adhere (South African Nursing Council, 2016b).

2.2.2 Midwifery programmes offered in selected countries

In most of the countries across the world, to become a midwife a student is required to be a qualified nurse first. In the United States, a learner nurse has to complete a four-year bachelor's degree programme to qualify as a nurse. After completion of the degree, the graduating nurse can obtain a licence to become a midwife. Registered nurses who already have bachelor's degrees can become qualified midwives within 24 months (RNtoBSN, 2017). However, in the United Kingdom (UK), one can only become a midwife at a university,

either by completing a three-year programme or, in the case of someone who has previously qualified as a nurse, by completing an 18-month course programme (Mander & Fleming, 2014). Similarly to the UK, in Australia and New Zealand, a three-year Bachelor of Midwifery degree programme has to be completed by learner nurses who do not have prior nursing education. Those already registered have to complete a graduate diploma or Masters of Midwifery. The programme is 12–18 months in length in Australia, and in New Zealand, it's at least two years of the full programme. Furthermore, Mander and Flemming (2014) state that in Germany a three-year programme has to be completed at a vocational secondary school (NMC, 2009&New Zealand College of Midwives, 2017).

In South Africa, to become a midwife, a student is required to complete a four-year bachelor's degree at a university, which qualifies the student to be registered as a nurse in general, community, psychiatry, and midwifery. A registered nurse who wishes to specialise as a midwife has to obtain a diploma in Midwifery by completing a one or two-year programme which is regulated by the South African Nursing Council (Alliance of African Midwives, 2011).



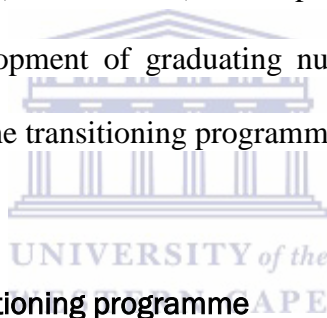
2.2.3 Pre-registration programmes for midwives

In the United Kingdom, a transition programme known as preceptorship is provided to newly graduated nurses and midwives. The programme is voluntary rather than mandatory. The programme duration is 6–12 months, and includes formal training and preparations for the role, with continuing support for the preceptors attending the programme (NMC, 2009).

The midwifery council in New Zealand requires of all new graduate midwives to complete a one-year practice programme. This is a national programme which is compulsory to complete prior to registration as a midwife (Midwifery Council: Guardians of Professional Standards,

2016). However, in Australia the transitioning programme is known as a graduate programme that will assist nursing and midwifery learner nurses to transition into practice. Completion of the programme is not a prerequisite for registration as a nurse or midwife (Government of Western Australia: Department of Health, 2017).

In South Africa, the transitioning programme is known as community service which is compulsory to complete. Before registering as a midwife, the graduating nurse and midwife must perform remunerated community service for a period of one year at a public health facility. If the practising graduate does not complete the programme within the two-year limit, the period already worked will elapse and the practitioner will have to repeat the full period of community service (SANC, 2017). The programme is seen as a positive contribution to the career development of graduating nurses and midwives, even if their expectations and perceptions of the transitioning programme differ.



2.2.4 Perceptions of the transitioning programme

A graduate nurse and midwife have different experiences regarding the transitioning programme in South Africa. In a study done by Roziers et al. (2014), the authors looked at the “Newly qualified South African Nurses lived experience of the transitioning from student to community service nurse”. According to the study, graduates experience uncertainty and fear as well as reality shock about their immediate future after graduation. Despite the above lived experiences by the transitioning graduate, Andren and Hammami’s (2011) findings have shown that these graduates still consider community service as a good way to learn and a vital part of their development as skilled and well-trained nurses. Transitioning programmes develop the skills of new graduates and further help to expand their knowledge which they will carry throughout their nursing careers. However, if the initial experience terrifies

graduates, the experience itself could have a negative effect on their confidence levels and that will lead graduates to question their knowledge and skills (Lewis & McGowan, 2015). Scholarly reports indicate both positive and negative views on the transitioning programme. A model was developed by the National Council of States Boards of Nursing (NCSBN) in the United States, Chicago, to promote public safety by supporting newly licenced nurses during their critical period and progression into public health care.

In 2009, the NCSBN developed a transition to practice module. The aim of the programme is to promote the safety of the public by supporting newly licenced nurses in their critical entry and progression to practice. With the programme in place, research has revealed that fewer medical errors have occurred and the overall competence ratings of newly graduated nurses have increased. The programme also resulted in less work-related stress for newly graduated nurses, and they were more satisfied with the care they provided. With this model in place, it has become less likely for these nurses to leave the nursing profession within their first year of practice. Finally, the programme assisted newly graduated and licenced nurses and midwives to be prepared for their roles as independent practitioners after the completion of the programme (National Council of States Boards of Nursing, 2014).

2.3 Preparedness to practise of undergraduate student nurses and midwives

Nursing and midwifery councils are primarily geared at producing competent and fit for practice nurses as soon as they graduate. Usher et al. (2015) conducted a study which investigated the undergraduate student nurse's self-reported preparedness for practice. It explores how third-year nursing learner nurses perceive their preparedness for practice. The findings of the study reveal that learner nurses feel prepared to practise and believe the

simulation experience is helpful in attaining this state. The study notes that expanded placements, increased use of simulation for clinical skills practice, smaller clinical skill class sizes, and modern equipment were identified as areas that needed improvement to enhance the learner nurses' levels of confidence and readiness for practice (Usher et al., 2015). Dlamini, Mtshali, Dlamini, Manhanya, Shabangu, and Tsabedze (2014) state that the new graduates perceive themselves as not being ready for practice, and that they receive no support from experienced staff during their first months of practice. According to Dlamini et al. (2014), collaboration is needed between academia and service and regulatory bodies involved to establish quality assurance mechanisms for clinical education. These measures will provide structural support for new graduates at service entry in a form of mentorship which will help to ease the burden of transitioning from academia to practice (Dlamini et al., 2014).



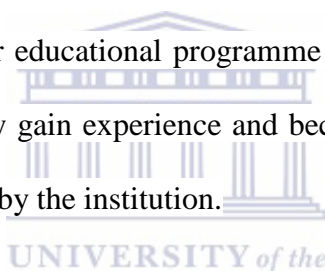
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Similarly, Kim et al. (2014) note that having a primary preceptor always present during clinical placement, will better the degree of nursing competence skills learner nurses will have once qualified. A study conducted by Cummins et al. (2015) on the experiences of new graduate midwives working in midwifery continuity of care models in Australia, revealed that having a mentor was important and knowing that they could call the mentor anytime for guidance made it easier for the new graduates. They also found that the new graduates respect their mentors and the support they receive could build their self-confidence in transitioning from student to midwife (Cummins, Denney-Wilson, & Homer, 2015).

Despite an identifiable gap between theory and practice, which results in learner nurses feeling incompetent and unprepared, they realise that there is still so much more to learn on the job after graduation (O'Brien and Dawson, 2013).

2.4 Competence levels of undergraduate student nurses and midwives

As previously noted, the aim of most training institutions and nursing and midwifery councils is to produce competent graduates (World Health Organization, 2009). Well-trained and competent nurses and midwives save lives and are an important benefit to the health care system. Looking at the competence levels of nurses and midwives is vital to nursing research. In 1984, Brenner developed the stages for clinical competence for nurses in the practical area, in which she states that competence is demonstrated by a nurse who has been doing the same task in a similar situation for two or three years. By then the nurse is able to demonstrate efficiency, is co-ordinated, and has competence in his or her actions (Brenner, 1984). Reading and Webster (2014) state that during practice, learner nurses demonstrate competences at all stages of their educational programme and developing career when they provide quality patient care. They gain experience and become competent by observing and undertaking specific tasks set out by the institution.



To attain these competences, student nurses have to demonstrate that they have the necessary understanding, skills, attitudes and practical capabilities to be qualified graduates who are fit for practice in a variety of roles after graduation (Sellman & Snelling, 2014). Zainullah, Ansari, Yari, Turkmani, Azfar and Bartlett (2014) did a clinical competence assessment on graduates which revealed that learner nurses had passing scores prior to graduation, but when they had to perform certain procedures after graduation, it was evident that they had not retained some of the skills learned (Zainullah et al., 2014). One would think that when learner nurses are found competent and graduate, they are prepared for practice. But, are they really prepared for practice once they have successfully completed their training programme?

According to Peate (2013), even though learner nurses are deemed competent and have successfully graduated as registered nurses and midwives, graduate learner nurses perceive

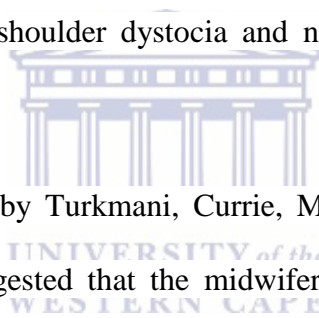
themselves as not being competent in some areas before practice. Rajeswaran (2016) did a study about the “Clinical Experiences of Nursing Learner nurses at a Selected Institute of Health Sciences in Botswana”, and the findings reveal that learner nurses do not feel entirely competent on performing certain procedures as expected, which they attribute to an overload of classroom work affecting their clinical experiences. The study further reveals an existing gap between theory and practice which generates conflict and influences the student’s learning negatively (Rajeswaran, 2016).

By allowing incompetent learner nurses to enter practice without the required competence and skills, compromises patient safety and weakens the public’s confidence in the health system, which makes it challenging to meet the national goals for improving maternal and new-born health (Yigzaw, Ayalew, Kim, Gelagay, Dejene, Gibson and Stekelenburg, 2015). If learner nurses are incompetent, they will graduate to be incompetent nurses, and incompetent nurses are a danger to the community they are serving and society overall. Theisen and Sandau (2013) state that educators should continue to focus on the development of critical thinking and clinical reasoning in order to prepare nursing learner nurses for the demands of the health care workplace. This will improve the development of competent and safe nurses for future practice, whose perceptions and experiences will be more positive than negative (Theisen & Sandau, 2013).

2.5 Midwifery learner nurses’ perceptions and experiences regarding clinical tasks

Midwifery practice can be very traumatic for some learner nurses, especially those who are experiencing a woman giving birth for the first time. In some instances, learner nurses reported that the experience affected their confidence to perform day-to-day duties

afterwards. Learner nurses are therefore not only afraid of the outcome of events, but also feel unprepared for how quickly a normal birth can become complicated. Some learner nurses were haunted by the longer-term consequences of adverse events that happen either before, during or after the delivery (Davies & Coldridge, 2015). All learner nurses expressed their strengths and weaknesses towards certain parts of the programme. For instance, Reynolds, Cluett, and Le-May (2014) state that learner nurses feel competent in performing HIV tasks but feel unprepared to provide up-to-date management of HIV in accordance with the guidelines, as their training programme had minimal coverage on the HIV guidelines. They also feel competent performing basic obstetric procedures, but as soon as the cases become complicated they feel that they are unprepared, and recommend more teaching time for obstetric complications such as shoulder dystocia and new-born resuscitations (Reynolds, Cluett, & Le-May, 2014).



In a study done in Afghanistan by Turkmani, Currie, Mungia, Assefi, Rahmanzai, Afzar, Bartlett (2013) the findings suggested that the midwifery training prepared midwives for complications before, during and after delivery. They felt competent with caring for mothers during the antenatal and postnatal periods, managing normal labour processes, dealing with retained placenta and breech deliveries, and providing family planning services. However, certain midwives felt that they were less prepared for managing cases of pre-eclampsia/eclampsia, shock and haemorrhage. They suggested that more practice during and after pre-service programmes is needed to maintain sufficient competence levels (Turkmani et al., 2013).

2.6 Perceptions and experiences of undergraduate nursing and midwifery learner nurses

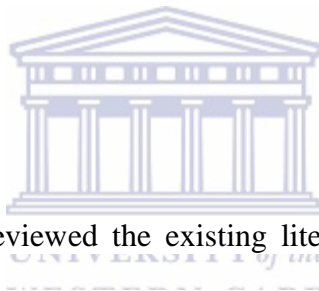
According to SANC, a professional nurse is somebody who is competent to practise comprehensive nursing and midwifery after graduation, and who should assume responsibility and accountability for autonomous decision-making during her or his practice (South African Nursing Council, 2017a). The clinical setting is perceived by learner nurses as being a larger threat to their learning than the learning classroom since the clinical setting needs a 'hands-on' approach. During clinical placements, learner nurses feel that the required standards of care are not being adhered to, leaving the clinical setting to become a confusing and stressful environment for them in which to acquire the skills needed for future practice (Letswalo & Peu, 2015).

Learner nurses consider what they had been taught in the classroom as hypothetical and not useful in practice. Nonetheless, they know that clinical practice is the main component of their learning process and plays an important part in improving their clinical competences (Tiwaken, Caranto, & David, 2015). According to Letswalo and Peu (2015) and Helm (2007), exposure to clinical risks may also deprive learner nurses of the opportunity to become competent practitioners. When student nurses are exposed to clinical risks, it impacts their academic learning and challenges their personal growth and development.

The fear of making mistakes and harming the patients during clinical practice is a reality that learner nurses face. Having less time during allocation to complete certain procedures produces anxiety in learner nurses. In addition to this, learner nurses believe the lack of support from both nursings institutions and organisations also has an adverse affect on their learning environment during clinical practice (Rajeswaran, 2016). How learner nurses perceive their learning experience makes it challenging for them to achieve the set standards to successfully complete their training programme. When learner nurses are working in the clinical settings, it allows them to have a direct experience of the real world of nursing. Clinical areas help learner nurses to practise and acquire the skills needed, to learn about

general nursing routines, and to improve their skills in preparation of becoming a registered nurse (Sharif & Masoumi, 2010).

In a study done by Tseng, Weng and Wang (2013) it has been noted that once learner nurses recognise that they achieved competence through their nursing practice, it influences their decision to stay in the nursing profession. However, they may decide not to enter the nursing profession because of their negative perceptions of the profession. This may be as a result of a poor work environment that they have experienced while in practice during their training programme. In other words, the practical area plays an important role in student development and a career in nursing, and whether those who enter the nursing profession will remain in the nursing profession (Tseng, Weng, & Wang, 2013).



2.7 Conclusion

In this chapter, the researcher reviewed the existing literature on determining the learner nurses' perceived levels of competence and their willingness to practise in a maternity unit after completing their midwifery training programme. The researcher focused on the importance of the midwifery training programme and the regulatory bodies involved as well as the length of existing selected midwifery programmes. Furthermore, the research reported on the transitioning programmes offered after the nurses and midwives completed their training programme and how well they perceived the transitioning programme. The study conducted looks at the perceived levels of competence of student nurses and midwives as it is a vital aspect during their training. When student nurses and midwives are not competent, it can have a negative impact on the health sector since it will affect the lives of patients that they care for. The study also reviewed the preparedness of graduating nurses and midwives to practise as well as their perceptions and experiences during their training. Learner nurses'

negative perceptions and experiences of the nursing profession could have an adverse impact on their training as well as their performance of certain clinical tasks during practice.



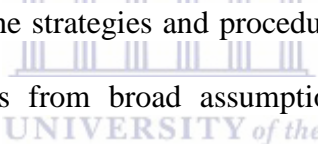
CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

Chapter 3 outlines the research design and methodology used in the study. The researcher addressed the following factors: research approach; design; methodology; data collection; data analysis; ethics statement; limitations of the study; and the validity and reliability of the instrument.

3.2 Research approach



The research approach refers to the strategies and procedures employed during the research, which develop the various steps from broad assumptions to detailed methods of data collection, analysis and interpretation (Creswell, 2014). Generally, the two approaches identified are quantitative and qualitative. Quantitative research is seen as a formal, deductive approach to resolving problems and test theories, whereas qualitative research uses a more subjective approach whereby theories are developed (Keele, 2011).

Gray, Burns and Grove (2012) note that a quantitative research approach is a formal, objective, and systematic study process. It is used to define and test relationships and, most importantly, to observe the cause-and-effect interactions between variables. It is a formal plan for conducting action research.

A quantitative approach was adopted in this study, and a survey was used to gather thorough descriptions of existing variables to evaluate the existing conditions and practices which could assist in making plans to improve midwifery practices (Burns & Groove, 2005).

3.2.1 Research design

The design of the study is seen as a blueprint for the study which maximizes control over issues that could impede the validity of the results (Grove et al., 2012). The research design gives structure and direction to how all the key parts of the research study are grafted together to try and address the research question formulated (Baran & Jones, 2016).

A non-experimental descriptive research design was selected to determine the perceived levels of competence and willingness to practise in a maternity unit of learner nurses, who were completing their final year of the four-year Bachelor Degree in Nursing and Midwifery at the University in the Western Cape.

3.3 Research methodology



A research methodology is the method used to conduct the precise steps of the study (Grove et al., 2012). It requires the gathering of empirical data by exploring the phenomena systematically via statistical computational techniques (Struwig & Stead, 2013).

The aim of the study was to determine learner nurses' perceived levels of competence and willingness to practise in a maternity unit at a university in the Western Cape Province.

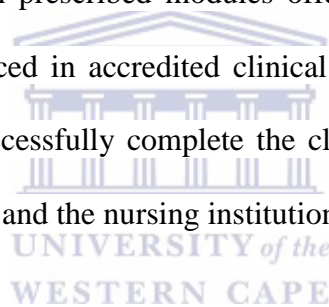
3.3.1 Objectives

1. To determine learner nurses' perceived levels of competence on key procedures in midwifery in the Western Cape Province.
2. To determine the perceived willingness of learner nurses to practise in a midwifery unit in the Western Cape Province.

A questionnaire was used to collect data, which was adapted to answer the above-mentioned objectives. Cronbach's alpha was used to test the reliability of the questionnaire. The data collected was given a numerical value and analysed using SPSS version 24.

3.4 Setting

The setting is defined as a place for conducting research (Grove et al., 2012). The study was conducted at a university in the Western Cape Province, South Africa. This school of nursing is accredited by the South Africa Nursing Council (SANC) to offer nursing programmes at undergraduate programme (B Nursing) such as the R425. The R425 programme is a full-time, structured programme with prescribed modules offered over four years. In addition, registered learner nurses are placed in accredited clinical facilities for compulsory clinical learning and are expected to successfully complete the clinical requirements set out in the programme as directed by SANC and the nursing institution.



3.5 Study population

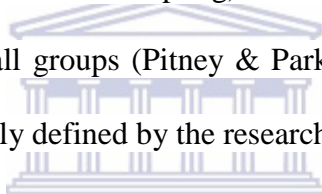
A population is all elements that meet the simple criteria for inclusion in a study (Grove et al., 2012). Furthermore, Profetto-McGrath, Polit, and Tatano Beck (2010) note that a target population is the total population that the researcher is interesting in. However, an accessible population contains cases from the target population that are obtainable to the researcher as a group of subjects (Profetto-McGrath, Polit, & Tatano Beck, 2010). For the present study, the accessible population that was used was learner nurses who were registered in their 4th year of training at the University of the Western Cape during the time of data collection in 2017.

3.6 Sampling

Sampling is defined as the selection of a subset of the population, in this case learner nurses, that will be used to take part in the study conducted by the researcher (Grove et al., 2012). In other words, a percentage of the population will be chosen to represent the total population (Profetto-McGrath, Polit, & Tatano Beck, 2010). In this study, the researcher used an all-inclusive sample because of the small population and also to accommodate possible non-responses.

3.6.1 All-inclusive sampling

All-inclusive sampling (total population sampling) includes everyone as respondents in a study, and usually applies to small groups (Pitney & Parker, 2009). A population is an all-inclusive group that is operationally defined by the researcher (Koh & Owen, 2000).



For the 2017 academic year, there was 247 learner nurses registered in the final year of the four-year Bachelor Degree in Nursing and Midwifery at the institution, and they were enrolled to partake in the current study. Due to national student protests at tertiary institutions in South Africa in 2016, data could not be collected. Data was then collected as soon as the university opened in 2017.

The inclusion and exclusion criteria for the current study are outlined below.

3.6.1.1 Inclusion

- All 4th year learner nurses registered in the Community and Health Science faculty.
- Period of 2017.
- Final population of 187 registered learner nurses.

3.6.1.2 Exclusion

- No learner nurses were excluded, due to the possible small population size.
- All first, second and third-year learner nurses were excluded from the study.

3.7 Data collection instrument

A questionnaire refers to a self-report form designed to elicit information that can be obtained from subjects through written responses (Grove et al., 2012). The study used an adapted, structured questionnaire that was developed by an academic specialising in Midwifery as the research setting. Written permission was obtained from H. Boltman-Binkowski (Personal communication) who developed the original questionnaire. This 89 Likert scale items was reduced to only 14 Likert scale items. The scale included five response categories. Each category was assigned a value ranging from a value of 1 for the most negative response to a value of 5 for the most positive response (Grove et al., 2012). The adapted questionnaire consisted of four sections (Section A, Section B, Section C and Section D).

3.7.1 The Questionnaire

3.7.1.1 Section A: Demographic data

The researcher asked the respondents to indicate their age, gender, marital status and their highest qualification achieved using closed-ended questions.

3.7.1.2 Section B: Midwifery

In this section the researcher wanted to establish whether the respondents plan to work in a midwifery unit after graduation and the amount of hours the respondents still needed to complete.

3.7.1.3 Section C: Likert scale regarding perceived levels of competence and willingness to practise

The self-reported levels of competence and perceived willingness to practise consisted of 14 Likert scale items. The 5-point Likert scale measuring the self-reported competence varied from 1 to 5 with their competence levels measured as follows: 1= very low; 2= low, 3= average, 4= high; and 5= very highly. The statements were related to key procedures needed to successfully complete the midwifery training programme.

Likewise, the items measuring willingness of nurses to practise in a maternity unit after completing their studies varied from 1 to 5 as follows: 1= very low; 2= low; 3= average; 4= high; and 5= very highly.

3.7.1.4 Section D: Readiness to work in maternity practice areas

The research looked at whether or not the respondents perceive themselves as ready to work in certain practical wards after graduation as a midwife. The practice areas identified were: antenatal; postnatal; theatre; labour ward; nursery; antenatal clinic; postnatal clinic; maternity obstetric unit (MOU); high-risk hospital(tertiary); and low-risk hospital(secondary).

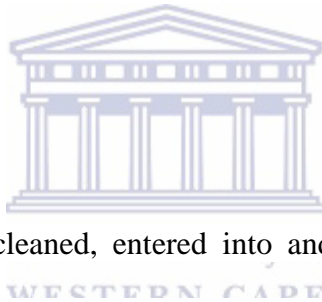
3.8 Data collection

Data collection is a precise, systematic gathering of information relevant to the research purpose or the specific objectives, questions or hypotheses of the study (Grove et al., 2012).

The data collection phase involves the development of the instruments that are used in the research for collection of data purposes, identification of data sources, and the context in which the sampling has to be done (Krishnaswamy, Sivakumar, & Mathirajan, 2009).

Questionnaires were handed out to all respondents who gave consent, and completed questionnaires were collected by the researcher. The researcher was present to answer all possible questions the respondents had while completing the questionnaire.

The respondents were given a consent form to complete prior to answering the questionnaire. Respondents had about 20 minutes to complete the questionnaires. Data was collected in September 2016; however, the process needed to be stopped due to the national student protests at South African universities. Data collected in September 2016 was used for the pre-testing. Data collection resumed in 2017, during the first two weeks after the university opened, with learner nurses who have successfully completed the theoretical midwifery curriculum at a university in the Western Cape Province.



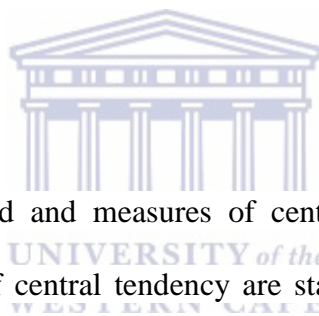
3.9 Data analysis

The collected data was coded, cleaned, entered into and analysed using SPSS v24. The categorised data collected was presented in a frequency table so that the outcome of the investigation can be seen according to these categories. The Likert scale data was recorded to five response categories. Each category was assigned a value ranging from a value of 1 for the most negative response to a value of 5 for the most positive response. The researcher further categorised the perceived competence table according to learner nurses perceiving themselves as slightly competent, as working towards competence, or as competent. For the willingness table the researcher categorised the table according to learner nurses being slightly willing, working towards willingness, and being very willing.

The following 14 variables were used in the perceived competence and willingness table:

1. Pelvic assessment
2. Vaginal assessment

3. Intravenous therapy
4. CTG monitoring
5. CTG interpretation
6. Episiotomy
7. Suturing perineum
8. Performing delivery
9. Breech delivery
10. Shoulder dystocia
11. Postpartum haemorrhage
12. Pre-eclampsia
13. Neonatal resuscitation
14. PMTC counselling



Frequencies were then calculated and measures of central tendency were calculated for numerical variables. Measures of central tendency are statistics or numbers expressing the most typical or average scores in a distribution. The mean, mode and median are measures of central tendency (Brink et al., 2012).

3.10 Validity and reliability of the instrument

3.10.1 Validity

Validity is concerned with the accuracy and truthfulness of scientific findings. Content, construct and face validity are the three different types of validity.

3.10.1.1 Construct validity

Construct validity is important for assessing the quality of the study conducted as it looks at the extent to which the results support the theory behind the research (McBurney & White, 2010).

3.10.1.2 Face validity

Face validity means that the instrument measures what it is supposed to measure (Brink et al., 2012).

3.10.1.3 Content validity

Content validity describes the evaluation of how well the tool used portrays all the elements that are relevant to the study that are being measured (Brink et al., 2012).

In the current study, content and face validity were used to support the adapted instrument. The instrument was developed by an advanced midwife and was refined after a pilot study was done. The 14 variables used on the scale were adapted to the level of 4th year learner nurses. Face validity was established through consultations with registered nurses who have completed the four-year degree programme and with practising advanced midwives.

The researcher used the items on the scale to determine the content validity of the instrument. The 14 variables used on the scale are derived from the midwifery practice book to determine the perceived competence and willingness levels of learner nurses, once they have successfully completed the midwifery programme. The following table reflects the content validity of the study:

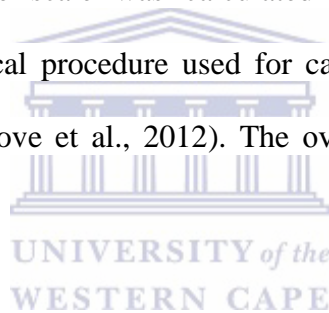
Table 3.1 Table showing the content validity

Variables	Questions
Perceived level of competence to practise in maternity practice areas	Questions 7–20 (B)
Perceived willingness to practise in maternity practice areas	Questions 7–20 (C)

3.10.2 Reliability

Reliability is concerned with the consistency, stability and repeatability of the instrument as well as the researcher's ability to collect and record information accurately (Brink et al., 2012). Since the adapted questionnaire has not been used before, a pilot study was conducted prior to the main study, after ethics approval for the study was obtained from the institution, to measure its reliability and validity. The pre-testing was used to determine whether the information presented in the questionnaire was understood by the learner nurses. During the pilot study, the researcher was also able to establish whether any difficulties were experienced with completing the questionnaire within the time limit.

The internal consistency of the scale was calculated by means of Cronbach's alpha coefficient, which is the statistical procedure used for calculating internal consistency for interval and ratio level data (Grove et al., 2012). The overall Cronbach's alpha of the 14 variables was 0.87%.



3.11 Pre-testing of instrument

According to Grove et al. (2012), a pilot study is done to determine whether there are any problems with the research design of the instrument and to examine the reliability and validity of the research instruments. Pre-testing was done in 2016 before the university was shut down due to student protests. Ten learner nurses who met the inclusion criteria participated and their feedback was used to adapt the questionnaire. Respondents indicated that there was enough time allocated to finish the questionnaire. However, the respondents stated that there were too many pages to complete.

Subsequently, the questionnaire was adapted and rearranged so that all the questions could be printed on double-sided pages.

3.12 Ethics statement

Grove et al. (2012) state that the researcher has the responsibility to be ethical when conducting research and with the reporting of that research. The researcher must demonstrate respect for the scientific community by protecting the integrity of the scientific knowledge and take into consideration the consequences of the research for the society. According to Brink et al. (2012), the researcher must be competent and accurate, and has to be honest in everything he or she does. Overall, the researcher needs to protect the rights of all human beings involved in the research and has an ethical responsibility towards that human beings involved (Brink et al., 2012).

3.12.1 Permission

Ethical Clearance (Reference number – HS/16/3/30) to conduct the study was obtained from the Higher Degree and the Research Ethics Committee of the Faculty of Community and Health Science at UWC. Permission was requested in writing to the Head of Department and the Registrar at UWC. The researcher approached the lecturers via e-mail and written consent was given to conduct research before or after lectures.

3.12.2 Right to self-determination

Brink et al. (2012) note that all respondents are autonomous and have the right to choose whether or not they want take part in the study.

The researcher informed the respondents about the study being conducted and what was expected from them. The respondents were informed that participation in the study was voluntary and that they would not be forced in any way. The respondents were further

informed that they would be able to withdraw from the study at any time as needed, with no negative consequence to be anticipated from withdrawing.

3.12.3 Informed consent

The informed consent form has to contain all the necessary information needed from the participant. Respondents need to understand all information on the consent form and have a choice of whether or not they will participate in the study (Brink et al., 2012).

Before handing out the questionnaires, the researcher introduced herself and provided the reasons for why the study was being conducted and why they were particularly selected to participate in the study. The information document and consent form were given to all respondents, and the informed consent forms were collected from all learner nurses who decided to participate in the study.



3.12.4 Right to privacy

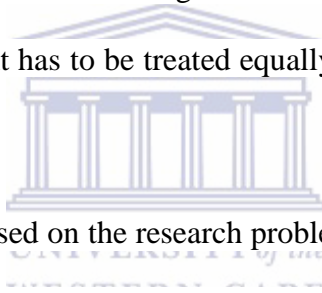
According to Grove et al. (2012), the individuals have the right to decide to what extent their private information will be shared with or withheld from others. Privacy was explained in detail to the respondents by the researcher and that it will be maintained at all times by coding the data. The researcher's contact details were provided on the questionnaire to make it available to all the respondents for any questions or uncertainty regarding the questionnaire. Although the questionnaire was carefully worded to the level of understanding of all respondents, the researcher was available to explain any wording and statements in the questionnaire that the respondents did not understand.

3.12.5 Right to confidentiality

Confidentiality refers to the manner in which the researcher manages the personal information shared by the respondents. The information received should not be shared with others without the approval of the respondent (Grove et al., 2012). Respondents were assured that all documentation would be kept confidential at all times, no names would be recorded nor made public, and that any personal information would be destroyed six years after the study. According to Creswell (2014), a researcher should avoid disclosing any information that could harm the respondent in any way possible.

3.12.6 Right to fair treatment

Grove et al. (2012) note that fair treatment is grounded on the ethical principle of justice, which states that every respondent has to be treated equally and has to receive what is due to him or her.



The respondents were selected based on the research problem and the objectives of the study, and every learner had the same chance to be selected for the study.

3.12.7 Right to beneficence

According to Brink et al. (2012), the researcher needs to protect the welfare of the respondents who have the right to be protected from harm and discomfort. Risks associated with participating in the study were minimized, and if any respondent experienced discomfort, support and counselling were available before, during or after the research.

3.13 Limitations of the study

As mentioned earlier, the study is descriptive which is why the findings cannot be generalised because the programmes structures may differ, and therefore influence the findings.



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CHAPTER 4

FINDINGS AND LIMITATIONS

4.1 Introduction

In this chapter the quantitative findings of the study are discussed. All the findings of the study are presented using descriptive frequency tables, a pie chart and main themes. The findings presented report on the reliability of the instrument, response rate, demographic data, the perceived competence level and willingness of 4th year learner nurses regarding key procedures during their midwifery training programme. The findings also looked at the willingness to practise in certain practical areas.

The demographic data consists of the age, gender, highest previous qualifications, and an open-ended question on whether the respondents want to work in maternity and how many hours they owed. SPSS version 24 statistical software was used to analyse the data presented.

The four sections of the study are presented as follows:

Section A: Demographic data

Section B: In this section the researcher wanted to determine whether the respondents plan to work in a midwifery unit after graduation and the amount of hours the respondents still needed to complete.

Section C: Coding of open-ended question

Section D: Looks at the perceived competence and willingness levels of the respondents.

Section E: The research looked at whether or not the respondents perceive themselves as ready to work in certain practical wards after graduating as midwives.

4.2 Results of the reliability analysis of instrument

The researcher used a Likert scale to demonstrate the perceived levels of competence and willingness in respect of key procedures during the respondents' midwifery training programme. The internal consistency and reliability analysis were tested through the Cronbach's alpha which was calculated. The Cronbach's alpha score calculated for the competence levels of the respondents was 0.82%, while the section on willingness to practise scored 0.95%.

4.3 Response rate

The population of the study was all registered 4th year learner nurses who successfully completed their midwifery training programme. The 10 learner nurses who participated in the pilot study were excluded from the main study due to changes made on the instruments and in order to eliminate bias. Out of a total of 247 registered 4th year learner nurses, 187 learner nurses who satisfied the inclusion criteria participated in the study by filling out the questionnaire. The calculated response rate was 76%.

4.4 Section A: Demographic data

In this section the researcher presents the age in years, the gender and prior education of the respondents.

4.4.1 Age

The figure below depicts the ages of the respondents which vary between 19 and 48 years and the range is 29. The mean age of the respondents is 24 years (SD= 4.8).

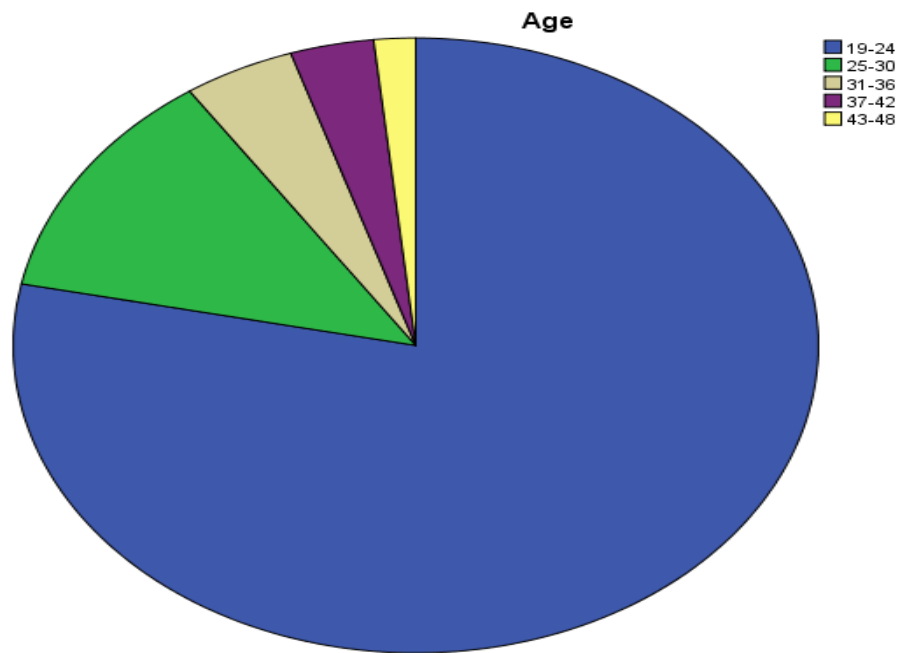


Figure 4.1 Ages of respondents



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4.4.2 Gender

Table 4.1 reflects that the majority of the respondents (n=156) were females (83%), and the rest (n=31) were males (17%).

Table 4.1 Gender

GENDER	TOTAL(n)	PERCENTAGE
MALE	31	17
FEMALE	156	83
TOTAL	187	100

4.4.3 Marital status

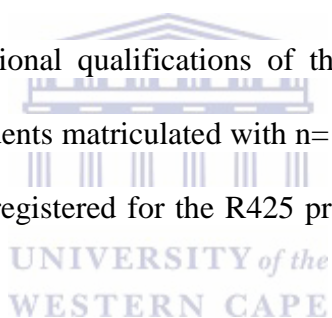
Table 4.2 looks at the marital status of the respondents that revealed that most of the respondents were single. Among the respondents, n=144 (77%) indicate those who are single and only n=2 (1%) of the respondents indicated other.

Table 4.2 Marital status

MARITAL STATUS	TOTAL (n)	PERCENTAGE
SINGLE	144	77
MARRIED	15	8
DIVORCE	4	2
STABLE RELATIONSHIP	21	11
OTHER	2	1
TOTAL	186	99

4.4.4 Educational qualifications

Table 4.3 reports on the educational qualifications of the respondents. According to the results, a large part of the respondents matriculated with n=167 (90%) and only n=4 (2%) had a college certificate before they registered for the R425 programme at the University of the Western Cape.

**Table 4.3 Educational qualifications**

EDUCATIONAL QUALIFICATION	TOTAL (n)	PERCENTAGE
MATRIC	167	90
COLLEGE CERTIFICATE	4	2
COLLEGE DIPLOMA	6	3
BACHELOR DEGREE	8	4
TOTAL	185	99

4.5 Section B: Determine whether respondents want to work in midwifery units after graduation and the hours still owed by respondents

The results in Table 4.4 show that the majority of the respondents, n=104 (56%), indicated that they would work in midwifery and n=80 (43%) indicated that they did not want to work as midwives. The majority of the respondents show an interest to practise in midwifery, which is a good indication that they might specialise in the field.

Table 4.4 Planning to work in maternity

Do you plan to work in a maternity unit after graduation?		
ANSWER	TOTAL (n)	PERCENTAGE
YES	104	56
NO	80	43
TOTAL	184	99

The respondents had to complete an open-ended question to motivate their answers to the above-mentioned question. See the coding of open-ended question in Section C.

Table 4.5 below looks at the amount of outstanding midwifery practical hours respondents still had to work to successfully graduate as midwives. According to the findings, n=139 (74%) of the respondents said they owed practical hours and only n=45 (24%) said did not have any outstanding hours.

Table 4.5 Practical hours owed

Do you still have outstanding hours for midwifery		
ANSWER	TOTAL (n)	PERCENTAGE
YES	139	74
NO	45	24
TOTAL	184	98

In Table 4.6, the researcher looks at how many outstanding practical hours the respondents still need to work to complete their midwifery hours as per the SANC requirements.

Table 4.6 Outstanding hours

If yes, how many hours are still outstanding		
HOURS OWED	TOTAL (n)	PERCENTAGE
0–100	56	30
101–200	29	16
201–300	7	4
301–400	3	2
401–500	2	1
UNSURE	36	19
TOTAL	133	72

According to the findings most of the respondents, n=56 (30%), owed 100 and less practical hours and only n=2 (1%) owed between 401–500 practical hours that they still had to work before graduating as midwives.

4.6 Section C: Coding of open-ended question

Respondents were also asked to substantiate their answers. Generally, the comments received were both negative and positive, and some respondents commented on the limited time they had during the midwifery training programme. The researcher developed themes and sub-themes from these comments of which the findings are set out below.

4.6.1 Themes

Section B of the questionnaire had an open-ended question for the respondents. The researcher wanted to know if the respondents wanted to practise in a maternity unit after graduation. The respondents had to tick Yes or No and motivate their responses.

Themes identified:

Positive views were identified from the responses of 4th year undergraduate learner nurses regarding their midwifery clinical placement. The respondents mentioned that midwifery is a field that they could see themselves practise in later in life. Some reported the field as interesting but challenging at times, though the experience helped them to develop a passion for midwifery. One respondent notes that new things are learned and that midwifery is a hands-on practice.



Table 4.7 Themes

Themes	Sub-themes
Positive view	Midwifery practices
Negative views	Difficulties experienced during training programme
Competence level during midwifery practice	Length of training programme

4.6.1.1 Positive views

Midwifery practices

Respondent 6 remarked that midwifery is a challenge every day.

R6. *“Because I love working there and have new challenges everyday.”*

Respondent 107 reports that midwifery practice is action packed where unpredictable cases occur daily in practice.

R107. *“Its action packed. Exciting, unpredictable cases occur daily.”*

Respondent 115 states that midwifery practice is hands-on which is why she enjoyed working in a low-risk area.

R115. *“I really enjoyed working in low-risk midwifery. It’s very hands-on.”*

Some of the respondents indicated that they loved and enjoyed midwifery and planned to specialise in the field. For instance, respondent 69 enjoyed the practical experience gained during the practical placement.

R69. *“Enjoyed the experience and new things learnt.”*

Respondent 162 enjoyed the practical experience so much that she plans to further her career in the midwifery field.



R162. *“I enjoyed working in midwifery and plan on studying advanced midwifery.”*

Another respondent (18) enjoyed the midwifery training programme and felt confident in the practical experience gained during their midwifery training programme. She reported the experience gained was adequate.

R18. *“I truly found midwifery something I truly enjoy. I have had over enough experience in it to have been able to confidently say I love midwifery.”*

Respondent 37 indicates her passion for midwifery after completing the midwifery training programme.

R37. *“I have develop[ed] a passion for midwifery.”*

Similarly, respondent 126 loves to take care of babies and has a passion for midwifery, especially during the antenatal, intra- and postpartum placement.

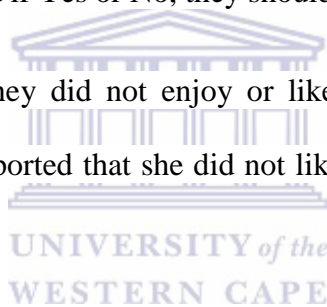
R126. *“I have a passion for midwifery and love to take care of baby antepartum, intra and post ...”*

4.6.1.2 Negative views

Difficulties experienced during the training programme

The undergraduate 4th year learner nurses also had some negative responses regarding their midwifery clinical placement. The researcher asked whether they would work in a midwifery practice area after graduation, and if Yes or No, they should motivate their responses.

The respondents reported that they did not enjoy or like midwifery as it is has a lot of complications. Respondent 34 reported that she did not like midwifery due to the amount of complications that can occur.



R34. *“I just don’t like midwifery; [it] could come with a lot of complications.”*

Respondent 177 thought that she would not make a good midwife.

R177. *“I did not enjoy it. I don’t think I can be a good midwife.”*

Respondent 87 found midwifery practice to be difficult.

R87. *“I found midwifery to be difficult.”*

Respondent 35 mentioned that she is a sensitive person and that the experience was traumatising to her.

R35. *“Found it so traumatising to see a woman in labour; in a way I am very sensitive.”*

4.6.1.3 Competences in midwifery practice area

Length of training programme

Competences play a massive role after graduation. Some respondents believe that they are not competent and need more time during their practical placement.

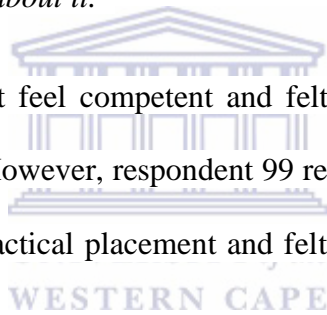
Respondent 4 states that she thinks she needs more practise in midwifery to be competent, however, she loves working there.

R4. *“I love midwifery and I think with more practise I can be more competent.”*

Respondent 67 mentions that she does not feel competent about midwifery.

R67. *“I don’t feel too competent about it.”*

Some of the respondents did not feel competent and felt that they needed more exposure during the training programme. However, respondent 99 reported not being competent due to the minimal time spent in the practical placement and felt she needed more exposure in the field first.



R99. *“Midwifery days was [sic] limited working in the ward ...feel not competent [and] need more exposure.”*

Respondent 121 notes that the responsibility associated with midwifery is greater than in the case of general nursing care. Furthermore, she thinks that she needs more time to gain enough experience in the midwifery field.

R121. *“I think that I need more experience before working in [a] midwifery setting. The responsibility in the midwifery setting is more than in general.”*

Additionally respondent 22 reported that she did not get time to fall in love with midwifery as the training programme was cramped with not a lot of time to work back practical hours.

R22. *“I feel like UWC midwifery course was cramped in a short time period, with many hours, this made me lose interest as I didn’t get time to fall ‘in love’ with it.”*

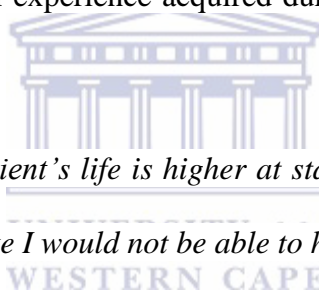
The respondents also mentioned that midwifery is a risky field to practise in.

R83. *“It’s too risky.”*

Respondent 163 said she did not enjoy working in a high-risk area which is mostly found in tertiary hospitals.

R163. *“I just don’t enjoy the work; it’s also a high-risk area.”*

Respondent 157 feels the six months of practical experience are not enough. She believes the stakes are high since the minimal experience acquired during the practical placement puts a patient’s life at risk.



R157. *“The level of risking a patient’s life is higher at stake and for someone that only had six months of experience, I feel like I would not be able to handle it.”*

Others prefer to practise in low-risk areas, labour wards and antenatal clinics.

Respondent 168 mentions that she would prefer to practise in a maternity obstetric unit (MOU), which she considers to be low risk.

R168. *“But only in low-risk institutions’MOU.”*

Respondent 70 states she was more competent in the labour and antenatal wards.

R70. *“I was most competent in labour ward and antenatal ...”*

4.7 Section D: Perceived competence and willingness levels of the respondents

The dependent variables used in the Likert Scale were identified as very low competence, low competence, some competence, high competence, and very high competence. However, the researcher recoded the dependent variables to slightly competent, working towards competence, and competent.

The findings in Table 4.8 presents the learner nurses' perceived levels of competence in key procedures in the following categories: Slightly competent, working towards competence, and competent. Furthermore, the researcher will also present the median and standard deviation in Table 4.8 below.



Table 4.8 Perceived competence

PERCEIVED COMPETENCE PROCEDURES	SLIGHTLY COMPETENT n (%)	WORKING TOWARDS COMPETENCE n (%)	COMPETENT n (%)	M	SD
Pelvic assessment	18 (10)	112 (60)	55 (30)	2.20	.60
Vaginal examination	1 (0.5)	66 (36)	118 (64)	2.63	.50
Starting an intravenous infusion	2 (1)	51 (28)	128 (70)	2.70	.49
Cardiotocograph (CTG) Monitoring	1 (0.6)	37 (20)	143 (79)	2.78	.43
CTG Interpretation	8 (4)	99 (54)	75 (41)	2.37	.57
Performing an episiotomy	21 (11)	119 (65)	43 (24)	2.12	.58
Suturing the perineum	6 (3)	75 (41)	103 (56)	2.53	.58
Performing a delivery	2 (1)	15 (8)	166 (91)	2.90	.34
Delivering a breech	76 (42)	97 (53)	10 (6)	1.64	.59
Delivering shoulder dystocia	67 (38)	94 (54)	14 (8)	1.70	.61
Management of PPH	3 (2)	69 (38)	109 (60)	2.59	.53

Management of pre-eclampsia	1 (0.5)	73 (40)	110 (60)	2.59	.50
Neonatal resuscitation	18 (10)	118 (65)	45 (25)	2.15	.57
Counselling of HIV-positive mother on treatment for PMTCT	1 (0.5)	49 (27)	135 (73)	2.72	.46

4.7.1 Perceived competence procedures

4.7.1.1 Procedure: vaginal examination, pelvic assessment and starting intravenous infusion

According to the findings, the majority of the respondents, n=112 (60%), indicate that they are working towards competence with regard to performing a pelvic assessment, with only n=18 (10%) reporting that they are slightly competent in performing a pelvic assessment on a pregnant woman. The mean for this procedure is 2.63 (SD=.60) with a sample size of n=185.

The findings report that the majority of respondents, n=118 (64%), perceive themselves to be competent in performing a vaginal examination and only n=1 (0.5 %) of the respondents report to being slightly competent to perform this procedure. The mean for this procedure is 2.63 (SD=.50).

The findings suggest that the majority of the respondents, n=128 (70%), perceive themselves as competent when starting an intravenous infusion, while only n=2 (1%) report to be slightly competent. The mean for this procedure is 2.70 (SD= .49) with a sample size of n=181.

4.7.1.2 Procedure: monitoring and interpreting of CTG

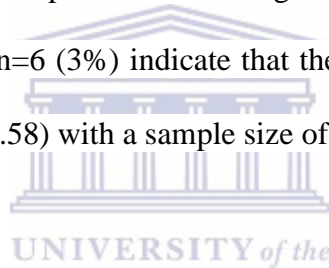
The results show that the majority of respondents, n=143 (79%), perceive themselves as competent in monitoring CTG and only n=1 (0.6%) report being slightly competent when they have to monitor the CTG. The mean for the procedure is 2.78 (SD= .43) with a sample size of n=181.

However, when the respondents were asked about the interpretation of the CTG, n= 99 (54%) indicated that they were working towards competence and n=8 (4%) were slightly competent. The mean for this procedure is 2.37 (SD= .57) with a sample size of n=182.

4.7.1.3 Procedure: performing an episiotomy and suturing the perineum

The results of performing and episiotomy indicate that the majority of the respondents, n=119 (65%), are working towards competence and n=21 (11%) indicate that they are slightly competent in performing an episiotomy. The mean for this procedure is 2.12 (SD= .58) with a sample size of n=183.

When looking at the respondents' responses on suturing the perineum, n=103 (56%) perceive themselves to be competent and n=6 (3%) indicate that they are slightly competent. For this procedure the mean is 2.90 (SD= .58) with a sample size of n=184.



4.7.1.4 Procedure: performing a delivery, delivering a breech and shoulder dystocia

When the respondents were asked to state their perceived levels of competence in delivering a baby, n=166 (91%) indicated that they are competent and a mere n=2 (1%) reported that they are slightly competent. The mean for this procedure is 2.90 (SD= .34) with a sample size of n=183.

However, when asked to state their perceived competence levels for delivering a breech presentation, the majority of the respondents n=97 (53%) indicated that they are working towards competence and only n=10 (6%) perceive themselves as competent. For this procedure the mean is 1.64 (SD=.59) with a sample size of n=183.

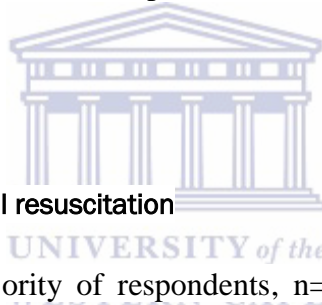
In respect of their perceived levels of competence for delivering a shoulder dystocia presentation, the majority of the respondents, n= 94 (54%), indicated that they are working

towards competence and only n=14 (8%) indicated that they are competent. The mean for this procedure is 1.70 (SD= .61) with a sample size of n=175.

4.7.1.5 Procedure: management of PPH and pre-eclampsia

The findings revealed that the majority of respondents, n=109 (60%), perceive themselves as being competent in managing a patient with PPH and n=3 (2%) report to being slightly competent. The mean for this procedure is 2.59 (SD= .53) with a sample size of n=181.

The findings note that the majority of respondents, n=110 (60%), perceive themselves as being competent in managing a patients with pre-eclampsia, with n=1 (0.5%) perceiving themselves as slightly competent. For this procedure the mean is 2.59 (SD= .50) with a sample size of n=184.



4.7.1.6 Procedure: neonatal resuscitation

The results showed that the majority of respondents, n=118 (65%), are working towards competence in resuscitating a new-born and n=18 (10%) are slightly competent. For this procedure the mean is 2.15 (SD= .57) with a sample size of n=181.

4.7.1.7 Procedure: counselling HIV-positive mothers

According to the results, n=135 (73%) of all the respondents perceive themselves to be competent in counselling an HIV-positive mother regarding mother to child transmission, with a mere n=1 (0.5%) indicating to be slightly competent. The mean for this procedure is 2.72 (SD= .46) with a sample size of n= 185.

The following findings present the respondents' perceived levels of willingness to perform key procedures by way of the categories: somewhat willing, willing, and very willing. This is presented in Table 4.9 below, which also includes the median and standard deviation.

Table 4.9 Perceived willingness

PERCEIVED WILLINGNESS PROCEDURES	SOMEWHAT WILLING n (%)	WILLING n (%)	VERY WILLING n (%)	M	SD
Pelvic assessment	23 (13)	58 (34)	91 (53)	2.40	.71
Vaginal examination	10 (6)	42 (24)	120 (70)	2.64	.60
Starting an intravenous infusion	9 (5)	19 (11)	145 (84)	2.79	.52
Cardiotocograph (CTG) Monitoring	10 (6)	31 (18)	130 (76)	2.70	.57
CTG interpretation	9 (5)	30 (18)	129 (77)	2.71	.56
Performing an episiotomy	23 (13)	46 (27)	103 (60)	2.47	.72
Suturing the perineum	17 (10)	37 (22)	117 (68)	2.58	.67
Performing a delivery	11 (7)	18 (11)	141 (83)	2.75	.56
Delivering a breech	22 (13)	42 (24)	109 (63)	2.50	.71
Delivering shoulder dystocia	27 (16)	38 (22)	106 (62)	2.46	.75
Management of PPH	12 (7)	32 (18)	130 (75)	2.68	.60
Management of pre-eclampsia	8 (5)	41 (24)	124 (72)	2.67	.56
Neonatal resuscitation	17 (10)	39 (22)	118 (68)	2.58	.66
Counselling of HIV-positive mother on treatment for PMTCT	10 (6)	29 (17)	132 (77)	2.71	.57

4.7.2 Perceived willingness procedures

4.7.2.1 Procedure: vaginal examination, pelvic assessment and starting intravenous infusion

The results show that the majority of the respondents perceive themselves to be very willing to perform a pelvic assessment, n=91 (53%), and n=23 (13%) of all respondents report to be

somewhat willing to perform a pelvic assessment. The mean for this procedure is 2.40 (SD= .71) with a sample of n=172.

When respondents were asked how willing they perceive themselves to perform a vaginal examination, n=120 (70%) were very willing to perform a vaginal examination and n=10 (6%) were somewhat willing to perform a vaginal examination after graduation. The mean for this procedure is 2.64 (SD= .60) with a sample size of n=172.

According to the results, most of the respondents perceive themselves as very willing to start an intravenous infusion, with n=145 (84%), while n=9(5%) of the respondents report to be somewhat willing. The mean for this procedure is 2.79 (SD= .52) with a sample size of n=173.



4.7.2.2 Procedure: monitoring and interpreting of CTG

The results show that the majority of the respondents perceive themselves as very willing to monitor a CTG report, n=130 (76%), whereas and n=10 (6%) of all respondents are somewhat willing to monitor a CTG report. The mean for this procedure is 2.70 (SD= .57) with a sample size of n=171.

With regard to interpreting a CTG report, the majority of the respondents perceive themselves as very willing, with n=129 (77%), and n=9 (5%) perceive themselves as somewhat willing to interpret a CTG report. The mean for this procedure is 2.71 (SD= .56) with a sample size of n=168.

4.7.2.3 Procedure: performing an episiotomy and suturing the perineum

The findings for performing an episiotomy revealed that n=103 (60%) of the respondents perceive themselves as being willing and n=23 (13%) of the respondents perceive themselves as somewhat willing to perform an episiotomy. The mean for this procedure is 2.47 (SD= .72) with a sample size of n=172.

In response to their perceived willingness to suture a perineum, the majority of the respondents indicate that they are willing to suture a perineum, with n=117 (68%), however, n=17 (10%) report to be somewhat willing. The mean for this procedure is 2.58 (SD= .67) with a sample size of n=171.

4.7.2.4 Procedure: performing a delivery, delivering a breech and shoulder dystocia

According to the findings, the majority of the respondents perceive themselves as being very willing to perform a delivery, with n=141 (83%), while n=11 (7%) are somewhat willing. The mean for this procedure is 2.75 (SD= .56) with a sample size of n=170.

For the delivery of a breech presentation, the majority of the respondents perceive themselves as very willing, with n=109 (63%), whereas n=22 (13%) perceive themselves as somewhat willing to deliver a breech presentation. The mean for this procedure is 2.50 (SD= .71) with a sample size of n=173.

In response to how willing they perceive themselves to deliver a shoulder dystocia presentation, the majority of the respondents indicate that they are very willing, with n=106 (62%), and n=27 (16%) are somewhat willing to deliver a shoulder dystocia presentation. For this procedure the mean is 2.46 (SD= .75) with a sample size of n=171.

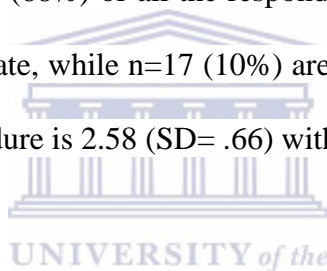
4.7.2.5 Procedure: management of PPH and pre-eclampsia

The results show that the majority of the respondents, n=130 (75%), perceive themselves as being very willing to manage PPH and n=12 (7%) are somewhat willing. The mean for this procedure is 2.68 (SD= .60) with a sample size of n=174.

When respondents were asked about the management of pre-eclampsia, n=124 (72%) of the respondents perceive themselves as being willing and only n=8 (5%) perceive themselves as being somewhat willing. The mean for this procedure is 2.67 (SD= .56) with a sample size of n=173.

4.7.2.6 Procedure: neonatal resuscitation

According to the findings, n=118 (68%) of all the respondents perceive themselves as being very willing to resuscitate a neonate, while n=17 (10%) are somewhat willing to resuscitate a neonate. The mean for this procedure is 2.58 (SD= .66) with a sample size of n=174.



4.7.2.7 Procedure: counselling HIV-positive mothers

The results indicate that the majority of the respondents perceive themselves as being very willing to counsel a mother that is HIV positive regarding PMTCT, with n=132 (77%), and n=10(6%) are somewhat willing. The mean for this procedure is 2.71 (SD= .57) with a sample size of n=171.

Table 4.10 Overall competence and willingness

Overall perceived competence and willingness levels (n=153)		
Variable	M	SD
Total perceived competence	47.5	7.2
Total perceived willingness	55.9	13.7

With a sample size of n=153, the total mean for all the perceived competence procedures is 47.5 (SD= 7.2), while the overall mean for perceived willingness procedures is 55.9 (SD=13.7).

4.8 Section E: Whether or not the respondents perceive themselves as ready to work in certain practical wards after graduating as midwives

In Table 4.11 the researcher looks at whether respondents are ready to practise in certain wards after they graduate as midwives, or whether they need more time in certain practical areas during the midwifery training programme.



Table 4.11 Readiness to work in maternity practice areas

Maternity practice areas	I am ready n (%)	Need more time n (%)	M	SD
Antenatal ward	143 (79)	37 (21)	1.21	.41
Postnatal ward	161 (89)	19 (11)	1.11	.31
Theatre	40 (22)	139 (78)	1.78	.42
Labour ward	137 (77)	41 (23)	1.23	.42
Nursery	112 (64)	64 (36)	1.36	.48
Antenatal clinic	152 (84)	29 (16)	1.16	.37
Postnatal clinic	155 (86)	25 (14)	1.14	.35
Maternity obstetric unit (MOU)	155 (86)	25 (14)	1.14	.35
High-risk hospital (tertiary)	54 (30)	124 (70)	1.70	.46
Low-risk hospital (secondary)	132 (74)	47 (26)	1.26	.44

4.8.1 Antenatal and postnatal ward and theatre

For the postnatal ward, n=161 (89%) of the respondents are ready and n=19 (11%) need more time. The mean for this procedure is 1.11 (SD= .31) with a sample size of n=180.

According to the findings, n=143 (79%) are ready to practise in an antenatal ward after graduation and n=37 (21%) need more time during the midwifery training programme. The mean for this procedure is 1.21 (SD= .41) with a sample size of n=180.

However, as far as the theatre is concerned, n=139 (78%) of the respondents indicate that more time needs to be spend in theatre during the midwifery training programme and only n=40 (22%) are ready to practise in theatre as registered midwives. The mean for this procedure is 1.78 (SD= .42) with a sample size of n=179.

4.8.2 Labour ward and nursery

With regard to a labour ward, n=137 (77%) of all the respondents report that they are ready and n=41 (23%) need more time in a labour ward as a student. The mean for this procedure is 1.23 (.42) with a sample size of n=178.

The findings further reveal that n=112 (64%) of all the respondents are ready to practise in nursery after graduation and n=64 (36%) need more time in nursery during their midwifery training programme. The mean for this procedure is 1.36 (SD=.48) with a sample size of n=176.

4.8.3 Postnatal clinic, MOU and antenatal clinic

In response to practising as a midwife in a postnatal clinic after graduation, the findings reveal that the majority of the respondents, n=155 (86%), are ready while n=25 (14%) need

more time during their midwifery training programme. The mean for this procedure is 1.14 (SD= .35) with a sample size of n=180.

Similarly to the postnatal clinic, the results for the MOU practice area show that n=155 (86%) of the respondents perceive themselves as ready and n=25 (14%) indicate that they need more time in an MOU setting during their midwifery training programme. The mean for this procedure is 1.14 (SD= .35) with a sample size of n=180.

In respect of an antenatal clinic, the findings reveal that the majority of the respondents, n=152 (84%), are ready to work in an antenatal clinic after graduation and n=29 (16%) need more time. The mean for this procedure is 1.16 (SD= .37) with a sample size of n=181.

4.8.4 Secondary (low-risk) and tertiary (high-risk) hospital

When looking at the results, the findings reveal that n=132 (74%) of the respondents are ready to work in a secondary hospital after they graduate as midwives, while n=47 (26%) need more time. The mean for this procedure is 1.26 (SD= .44) with a sample size of n=179.

However, the findings indicate that the majority of the respondents, n=127 (70%), need more time during their midwifery training programme to practise in a tertiary hospital setting, while only n=54 (30%) are ready to practise in a tertiary hospital once they are registered midwives. The mean for this procedure is 1.70 (SD= .46) with a sample size of n=178.

4.9 Limitations

The study was conducted at only one university in the Western Cape. The findings of the study cannot be generalised since the programmes differ from institution to institution. The size of the sample is also part of the limitation of the study conducted.

4.10 Conclusion

In this chapter, the researcher covered the quantitative as well as the coding of open-ended question. The results were extracted from the questionnaires that the respondents had to complete. These results were presented in the form of a pie chart, tables and themes. Finally, the researcher commented on the limitations of the current study. In Chapter 5, the researcher will elaborate on the findings, make some recommendations, and conclude the current study.



CHAPTER 5

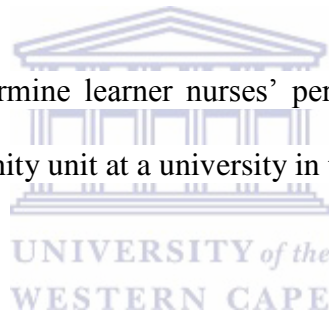
DISCUSSION OF FINDINGS, RECOMMEDATIONS AND CONCLUSION

5.1 Introduction

The research will present and discuss the findings in this chapter, which is in relation to the demographic data and the objectives of the study, as well as the relevant literature reported from different studies. Furthermore, in this chapter the research will also look at the limitations, recommendations and conclusions of the study.

5.2 Aim of the study

The aim of the study is to determine learner nurses' perceived levels of competence and willingness to practise in a maternity unit at a university in the Western Cape Province.



5.3 Objectives

1. To determine learner nurses' perceived levels of competence on key procedures in midwifery in the Western Cape Province.
2. To determine the perceived willingness of learner nurses to practise in midwifery units in the Western Cape Province.

5.4 Demographic data – Section A

5.4.1 Age

In the current study, the majority of the respondents were less than 25 years of age with a mean age of 24 years. The youngest respondent was 19 years old, which could suggest that

the respondent commenced the training programme at the age of 16 years, and the eldest respondent was 49 years old. The findings suggest that at graduation the majority of the respondents will be 26 years old, since midwifery is done in the third year of the training programme. The findings is similar to a study done by Auerbach, Buerhaus and Staiger (2011), which state that the number of newly registered nurses aged 23 to 26 who are entering the nursing profession is increasing. However, they questioned whether the interest to study nursing will continue to increase at this rate in the future. On the other hand, they indicated that the nursing profession might grow faster than initially thought given the amount of young, new registered nurses who are entering the profession (Auerbach, Buerhaus, & Staiger, 2011).



5.4.2 Gender

Rispel (2015) and Masters (2005) report that nursing is still perceived as a female-dominated profession regardless of the increased number of men entering the profession. The findings of the current study are similar, and show that the majority of the respondents are females. This is quite common since nursing is traditionally seen as a profession for women. A study done by Rispel, Blaauw, Chirwa and de Wet (2014) about the factors influencing agency nursing and moonlighting among nurses in South Africa, reveal that the majority of respondents are females. When looking at the gender-based statistics in the Western Cape, the statistics shows that females dominate the nursing profession.

5.4.3 Marital status

The findings of the study report that the majority of the respondents were single, while the rest of the respondents were either divorced or in a stable relationship, or described their

status as “complicated”. Noting that the majority of the respondents are fairly young adults, approximately 24 years old, it is highly likely that the majority would be single.

5.4.4 Educational qualifications

The results show that the majority of the respondents did not have any tertiary qualifications prior to registering for the R425 degree training programme. Those respondents who had tertiary qualifications before registering for the R425 degree training programme were qualified in different fields, and only two respondents had former experience in the nursing field. With the respondents being young adults, it is likely that most of the respondents registered for the R425 programme after completing their secondary education (matric). The researcher did not compare the competence levels between the groups since most of the respondents did not have any prior educational qualifications.



5.5 Intention to practise as a midwife

Clinical experience during training programmes plays an important role in learner nurses’ professional development. How learner nurses perceive midwifery during their clinical placement will hugely influence their decision to specialise in a specific field of choice. The findings reveal that the majority of the respondents intend to practise as midwives once qualified.

Edward, Warelow, Hemingway, Hercelinskyi, Welch, McAndrews and Stephenson (2015) state that personal clinical experience is identified as one of the major motivational factors for undergraduate learner nurses to choose mental health nursing as a career or not. Furthermore, the findings of a study by Tseng et al., (2013) indicate that the experiences in clinical

situations help support learner nurses to develop positive attitudes and professional values which lay the foundation for a specific career path in nursing.

5.6 Outstanding midwifery practical hours

According to the findings, most respondents owed practical hours. The UWC (Faculty of Community & Health Science) yearbook of 2016 states that learner nurses are allowed to register for the next level of training or should be admitted for examinations at any year level as long as the student complete 80% of the specified practical hours. The findings reveal that the majority of the respondents have less than 100 hours outstanding. Some of the respondents also indicated that they were not sure about the amount of hours they have outstanding. The amount of hours owed by learner nurses could have been less, but the nationwide student protest which took place in 2016 disrupted many learner nurses' academic and practical training. Since most of the learner nurses had less than 100 outstanding practical hours, their overall competence levels was not affected. However, this could be the reason why students rated lower their perceived level of competence in high risk practical areas.

5.7 Perceived competence and willingness procedures

The current study is focusing on the perceived levels of competence and willingness of undergraduate learner nurses to practise in a maternity unit after graduation. The study looked at some of the core competences of the midwifery training programme as the main goal of nursing and midwifery councils is to have competent and prepared graduates who are able to practise independently (World Health Organization, 2009). Competence is seen as an important aspect of the nursing profession globally. Successful completion of the training programme does not imply that new registered nurses or midwives are prepared and competent for practice Dlamini et al., (2014). However, Turkmani et al. (2013) suggest that

midwives do feel competent in certain areas of practice such as performing basic obstetric procedure.

5.7.1 Procedure: vaginal examination and pelvic assessment

A vaginal examination is important in midwifery practice as it is performed on a routine basis when women are in labour. It is needed to monitor the progress of labour and therefore it is important for midwives to be competent in performing this procedure (Muliira, Seshan, & Ramasubramaniam, 2013).

The findings of the study concluded that the respondents perceive themselves as competent in performing a vaginal examination and more willing to perform a vaginal examination competently once they are qualified midwives. These findings are similar to that of Reynolds, Cluett and Le-May (2014), who revealed that learner nurses were competent when performing a vaginal examination. However, the findings of both studies do not correlate with a study by Skirton, Stephen, Doris and Cooper, (2012) who found that learner nurses' competence levels were low when they had to perform a vaginal examination on women who were in labour.

Reynolds, Cluett and Le-May (2014) further find that learner nurses are competent at performing the basic obstetric procedures such as pelvic assessment during practical training. The results of the current study differ from this. The majority of the respondents indicated that they perceive themselves as not yet fully competent, even after successfully completing the midwifery training programme. However, they indicated that after graduating as midwives, they would be more willing to perform a pelvic assessment once in practice.

5.7.2 Procedure: monitoring and interpreting of CTG

The results show that almost three-quarters of the respondents perceive themselves competent when monitoring the fetal heart rate while in practice. The fetal heart rate needs to be monitored during pregnancy, especially when the pregnant woman is classified as a high-risk patient. When a pregnant woman is in labour, the fetal heart rate is monitored to detect any problems that could occur to the fetus while in utero, especially during the intrapartum period.

The study also shows that the respondents would be more willing to monitor the fetal heart rate once they are registered midwives. However, Sharma, Hildingsson, Johansson, Prakasamma, Ramani and Christensson (2015) suggest that learner nurses have low confidence when they have to monitor and interpret the fetal heart rate on women in labour.

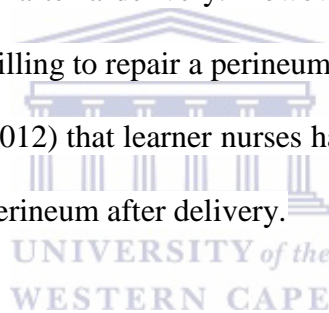
Similarly, the findings of the current study show that the majority of the respondents do not perceive themselves as competent to interpret the fetal heart rate. This could be due to the fact that they do not have sufficient skills and experience to interpret the results of the report. However, most of the respondents indicated that once qualified they would be more willing to interpret the report. Interpreting the fetal heart rate is of great importance in obstetrics, since a wrong interpretation puts the lives of the unborn baby and mother at risk.

Ugwumadu (2014) reported on the guidelines for monitoring and interpreting fetal heart rate and emphasised that when midwives and obstetricians have a lack of confidence in interpreting the CTG, it could lead to unnecessary operative intervention or even neonatal death. This in turn, could increase the neonatal mortality rate. CTG interpretation is a mandatory skill for obstetrics which is particularly important during the intrapartum period (Ugwumadu, 2014).

5.7.3 Procedure: performing an episiotomy and suturing the perineum

According to the study, the respondents did not perceive themselves as competent when they had to perform an episiotomy during practice. Skirton et al. (2012) had similar results which revealed that learner nurses had low confidence in performing an episiotomy. This could be since most hospitals use the “hands-on” and “hands-off” technique rather than performing an episiotomy. Evidence has shown that this technique is less likely to cause severe perineal trauma during delivery (Rezaei, Saatsaz, Chan and Nia, 2014). However, fewer respondents are more willing to perform an episiotomy once they are qualified midwives.

In this study, the results show that just over 50% of the respondents perceive themselves competent to repair the perineum after a delivery. However, the findings also note that the majority of the respondents are willing to repair a perineum once qualified. This is contrary to the conclusion of Skirton et al. (2012) that learner nurses had low competence when they had to repair any level of tear to the perineum after delivery.

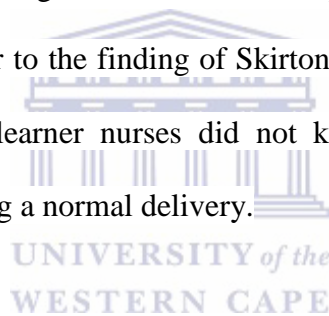


5.7.4 Procedure: management of PPH and pre-eclampsia

The results of this study show that most respondents perceive themselves competent in starting an intravenous infusion. Graduates need to be competent to ensure that patients have IV access because when postpartum haemorrhage occurs, it is vital for fluids to be replaced as soon as possible (Woiski, Scheepers, Liefers, Lance, Middeldorp, Lotgering, Hermens (2015). Postpartum haemorrhage and pre-eclampsia are some of the major conditions in South Africa that contribute to an increase in maternal death if not promptly recognised and managed (World Health Organization, 2017). The findings of this study revealed that the majority of the respondents perceive themselves as competent to manage a patient with postpartum haemorrhage. Most of the respondents also reported being very willing to manage these complications once qualified.

Competence in the management of postpartum haemorrhage and pre-eclampsia are critical when dealing with these life-threatening situations, as this can save the life of the mother and assist in decreasing the maternal death rate. In response to how they perceive their competence in managing a patient with pre-eclampsia, the majority perceive themselves as competent. Likewise to their responses to managing postpartum haemorrhage, the respondents perceive themselves not only competent with managing both procedures but are also very willing to manage these conditions once qualified.

The results of the present study are not consistent with the findings of Turkmani et al. (2013) and Skirton et al. (2012). In a study done by Turkmani et al. (2013), it was found that learner nurses are not very willing to manage conditions such as postpartum haemorrhage and pre-eclampsia. This finding is similar to the finding of Skirton et al. (2012) which revealed that, during the intrapartum period, learner nurses did not know how to identify or manage difficulties that could occur during a normal delivery.



5.7.5 Procedure: neonatal resuscitation

The results of the study show that the respondents do not perceive themselves competent when they are faced with a neonatal resuscitation during practice, with the majority of the respondents indicating that they are working towards competence in this area. This finding is similar to that of a study done in India by Sharma et al. (2015), who found that learner nurses have low levels of confidence when they have to apply basic neonatal care and manage neonatal complications once they arise. Having competent and skilled birth attendants present at birth is vital as these skills and competences save the lives of neonates. Consequently, this will help to decrease the child mortality rate (World Health Organization, 2009).

5.7.6 Procedure: counselling HIV-positive mothers

Reynolds, Cluett and Le-May (2014) state that learner nurses feel competent in performing the HIV task but feel unprepared to provide up-to-date management of HIV in accordance with the guidelines, since their training programme had minimal coverage on the HIV guidelines. The findings of the present study concur with that of Reynolds, Cluett and Le-May (2014) which show that most of the respondents indicated that they perceive themselves as competent to counsel mothers regarding prevention of mother to child transmission of HIV (PMTCT). It is important that learner nurses, newly graduates, and practising nurses and midwives make sure that they keep abreast of the constantly changing HIV guidelines.

5.8 Maternity practice areas

5.8.1 Low-risk practical areas

According to the findings of the study, the majority of the respondents indicated that they do not need time in low-risk settings as they feel comfortable caring for mothers and babies in these practical areas. Nonetheless, the respondents have indicated that there are some practical areas where they may have to spend more time in during the midwifery training programme.

With regard to antenatal, postnatal, MOU and labour wards, most of the respondents indicated that they do not need more time in these areas during practical placements. This finding is consistent with that of Mirzakhani, Jahani Shorab, Golmakani, Tafazoli and Ebrahimzadeh (2012), which revealed that when learner nurses graduate midwifery, they have adequate skills in how to manage low-risks mothers and infants. Similarly, Skirton et al. (2012) also state that learner nurses feel competent when they are working in a low-risk setting since they can provide care to pregnant women.

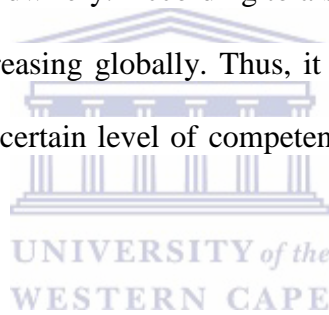
When the respondents were asked to indicate if they needed more time in the nursery, the majority of the respondents indicated that they were prepared. However, comparing this to

their responses during low-risk placements, fewer respondents indicated that they are prepared. This may indicate that the respondents need more time in the nursery as they also reported that they do not perceive themselves competent in neonatal resuscitation.

5.8.2 Theatre

According to the results of the study, the majority of the respondents reported that they are not prepared and need more time in theatre. A study done by Pierides et al. (2013) revealed that learner nurses had a lack of theatre experience during their training programme.

Undergraduate midwifery learner nurses need more time in theatre as it is one of the basic skills needed while working in midwifery. According to a study done by Betrán et al. (2016), the caesarean section rate is increasing globally. Thus, it is important for learner nurses to perceive themselves as having a certain level of competence in theatre before graduating as midwives.



5.8.3 High-risk areas

The findings of the study reveal that the majority of the respondents indicated that they need more time in high-risk areas during their midwifery practical placement. The results are similar to those of Skirton et al. (2012), who reported that learner nurses need more time to practise their competences and skills in high-risk areas. The learner nurses reported that if they are longer in high-risk areas it would be beneficial to them as learner nurses (Skirton et al., 2012). More attention needs to be paid to the practical hours that learner nurses spend in high-risk areas, since the skills and knowledge obtained in these areas are vital to the development of a midwife.

5.9 Conclusion

Although all the respondents successfully completed their midwifery training programme, they were asked how competent they perceive themselves when performing certain key procedures. The findings of this study revealed that the respondents perceive themselves competent to perform the basic obstetric procedures. The objectives of the study were to determine the perceived levels of competence and willingness of 4th year learner nurses. Furthermore, the findings revealed that the respondents perceive themselves competent to perform most key procedures. The study also revealed that the respondents are more willing to perform all the key procedures once they are qualified midwives.

However, there were certain areas in which they perceived themselves to have low competence. For instance, the respondents indicated that they have very low competence when they have to perform an episiotomy. This could be due to the “hands-on” and “hands-off” approach that has been adopted in hospitals in recent years. However, it is important for learner nurses to at least gain the basic skill during their training programme, as this will help once they are independent practitioners in the midwifery field.

Trained, skilled practitioners are needed during the delivery as the majority of the respondents are not competent when they have to deliver a breech or shoulder dystocia presentation. The reason why respondents do not feel competent could be the lack of exposure to obstetric emergencies during practice. It is therefore important that these skills are extensively covered in the skills laboratory during the training programme. This could be the only place where learner nurses would be able to acquire the basic skills that qualified midwives require.

With the staff shortages in the health care sector, it is important for learner nurses to learn the basic skills while in training, such as being competent to assist an obstetrician during a

neonatal resuscitation. These skills are important to have because it can make a huge difference in the outcome of a neonatal resuscitation.

Finally, more time is needed in high-risk practical areas since the current study has shown that respondents are prepared to practice in low-risk areas, whether primary or secondary level, but needed more time in high-risk areas, especially in theatre. Achieving clinical competence as a student while in training will produce a competent independent practitioner.

5.10 Recommendation

Given the findings of the study, the researcher has some recommendations for further research in the midwifery field and to improve the effectiveness of training programmes, despite the limitations presented.



5.10.1 Further research

In South Africa, further research is required to determine the competence levels of student midwives and newly qualified midwives since research in this field of practice is minimal.

Further research has to be done regarding the preparedness of student and newly qualified midwives.

5.10.2 Training programmes

According to the results of the study conducted, training institutions need to provide student midwives with more opportunities whereby they can increase their skills in high-risk areas.

More time is needed in high-risk areas during practical placements, such as the nursery, theatre and high-risk areas in tertiary hospitals.

More time is needed in the skills laboratory to prepare learner nurses for key procedures in which respondents perceive themselves to have low competence i.e. delivering a breech, shoulder dystocia, neonatal resuscitation, theatre and high-risk hospital (tertiary).

More time needs to be considered for learner nurses to spend in high-risk areas where they can acquire the basic skills to equip them to become independent practitioners once they qualify as midwives.

Teaching and mentoring are needed for newly qualified midwives after graduation during the transitioning programme.



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Annexure 1: Information sheet



Project Title: Determining learner nurses' perceived level competence and willingness to practice in a maternity unit at a University in the Western Cape Province

What is this study about?

This is a research project being conducted by Charlene Isaacs at the University of the Western Cape. We are inviting you to participate in this research project because you have valuable information to contribute to the study. The purpose of this research project is to determine the perceived level competence and willingness of learner nurses' to practice in a maternity unit.

What will I be asked to do if I agree to participate?

You will be asked to complete a questionnaire distributed by the researcher. The questionnaire will be completed after lectures and is expected to last 10-20 minutes

Would my participation in this study be kept confidential?

The researcher undertakes to protect your identity and the nature of your contribution. To ensure your anonymity, the questionnaire does not require you to enter any personal details

To ensure your confidentiality, all questionnaires will be kept confidential and locked in cabinet, whereby the researcher will only have access to.

If we write a report or article about this research project, your identity will be protected. In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others. In this event, we will inform you that we have to break confidentiality to fulfil our legal responsibility to report to the designated authorities.

What are the risks of this research?

There may be some risks from participating in this research study. Risks associated with participating in the study will be minimized, and should any discomfort be experienced, support and counselling will be available and provided to the participants that may experience any discomfort before, during or after the research.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the investigator learn more about the perceived level of competence and willingness of learner nurses' to practice in a midwifery unit. We hope that, in the future, other people might benefit from this study through improved understanding of the learner nurses perceived level of competence and willingness to practice in a maternity unit, and that the findings of the study might help future students to be better prepared to practice in a midwifery unit after their graduation.

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. Participation in the research is not a course requirement.

What if I have questions?

This research is being conducted by *Mrs Charlene Isaacs from the School of Nursing at the University of the Western Cape*. If you have any questions about the research study itself, please contact *Mrs Charlene Isaacs* at:

School of Nursing
University of the Western Cape
Private Bag X17
Bellville 7535
Tel.: 079 370 0976
Email: 3517755@myuwc.ac.za

Or the study supervisor:

Prof H Julie
School of Nursing
University of the Western Cape
Private Bag X17
Bellville 7535
Tel: 021 959 2749
Email: [hj Julie@uwc.ac.za](mailto:hjulie@uwc.ac.za)

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Prof Karien Jooste
Head of Department: School of Nursing
University of the Western Cape
Private Bag X17
Bellville 7535
kjooste@uwc.ac.za

Prof José Frantz
Dean of the Faculty of Community and Health Sciences
University of the Western Cape
Private Bag X17
Bellville 7535
chs-deansoffice@uwc.ac.za

This research has been approved by the University of the Western Cape's Research Ethics Committee. REFERENCE NUMBER: HS/16/3/30



Annexure 2: Consent form

A: PARTICIPANT INFORMATION SHEET

Title: Determining learner nurses' perceived level competence and willingness to practice in a maternity unit at a University in the Western Cape Province

What is the purpose of the study?

This research study is conducted by Charlene Isaacs as a requirement for the fulfilment of the Master's Degree program at the University of the Western Cape. The purpose of the study is to determine the perceived readiness of final year nursing students to practice in a maternity setting after graduation in a University of the Western Cape.

What am I expected to do in my participation in this study?

You will be expected to complete the questionnaire conducted by the researcher at your convenient place and time. The questionnaire is expected to last for about 10-20 minutes.

Is my participation in this study confidential?

Your information provided for the sake of the study will be kept confidential by keeping it in a lockable cabinet. The questionnaire does not require you to enter any personal details. In the final report, and in case of publication confidentiality will still be maintained.

Any risks in participating in the research study?

There are no known risks for taking part in this study, however in case that risks have arisen action will be taken to prevent you being affected by the risks.

What are the benefits for taking part in the study?

There are no personal gains, but the findings of the study have the potential to convey knowledge that will aid health care workers, particularly midwives and nursing institutions with evidence to help prepare students better to practice after graduation and thus facilitate the provision of improved maternal and child care.

Any room for withdrawal in participating in the research study?

Participation is strictly voluntary, and you are free to choose not to take part in the study. In the case that you have decided to take part in the study, you may as well feel free to withdraw

participation at any point, and no punitive measures shall be imposed regarding such decision on your part.

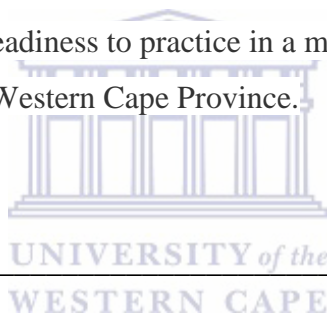
What action do I take if I have any question regarding the study?

The researcher can be contacted at any time if there are any concerns pertaining to this research study by using the following contact information: Mobile-, email- The research supervisor can also be contacted on the following numbers:..... Email:

The permission to conduct the study has been granted by the Senate Research Committee and the Ethics Committee of the University of the Western Cape.

B: CONSENT FORM

Title: Determining the perceive readiness to practice in a maternity unit for final year nursing students in one University in the Western Cape Province.



Participant's name: _____

Signature: _____

Witness name: _____

Signature: _____

Date: _____

I _____, the participant have been proposed to take part in this research study currently being conducted by Charlene Isaacs, a Master's Degree student at the University of the Western Cape. I have been assured by explanation that my identity will not be disclosed and that my taking part in the study is strictly voluntary. I have been told that I have the right to withdraw my participation at any time, and that such withdrawal will not be punitive on my part. The questions that I posed to the researcher were responded to appropriately. I have also been informed that even if the findings of the study are published anonymity will still be maintained. Information derived from the study will be confidential but accessible to the

research supervisor, and submitted for a Master Degree. There is no personal, financial or other gain regarding my participation in this study. I have been told that the interview will be audio recorded and I have given permission for the recording to be done.

I hereby, voluntarily give consent to take part in the study.

Signed at _____ on _____ 20 _____

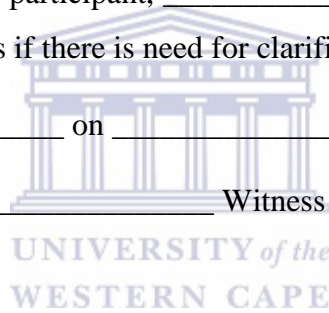
Participant: _____ Witness: _____

Statement by the Researcher:

I _____, the undersigned do hereby declare that I have explained the content of the document in English to the participant, _____ (Name of participant) and requested her to ask questions if there is need for clarification.

Signed at _____ on _____ 20 _____

Researcher _____ Witness _____



Annexure 3: Ethical clearance



OFFICE OF THE DIRECTOR: RESEARCH RESEARCH AND INNOVATION DIVISION

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10 August 2016

Mrs C Isaacs
School of Nursing
Faculty of Community and Health Sciences

Ethics Reference Number: HS/16/3/30

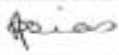
Project Title: Determining learner nurse' perceived level of competence and willingness to practice in a maternity unit a University in the Western Cape Province.

Approval Period: 10 May 2016 – 10 May 2017

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology and ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval. Please remember to submit a progress report in good time for annual renewal.

The Committee must be informed of any serious adverse event and/or termination of the study.



Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

PROVISIONAL REC NUMBER - 130416-049

FROM HOPE TO ACTION THROUGH KNOWLEDGE

Annexure 4: Permission to conduct study at UWC



**STUDENT
ADMINISTRATION**
Administration Building, 1st Floor
ashaikjee@uwc.ac.za, rochoeman@uwc.ac.za
021 959 2110

18 August 2016

Dear Charlene Isaacs

RE: PERMISSION TO CONDUCT RESEARCH AT THE UNIVERSITY OF THE WESTERN CAPE

As per your request, we acknowledge that you have obtained all the necessary permissions and ethics clearances and are welcome to conduct your research as outlined in your proposal and communication with us.

Please note that while we give permission to conduct such research (i.e. interviews and surveys) staff and students at this University are not compelled to participate and may decline to participate should they wish to.

Should you wish to make use of or reference to the University's name, spaces, identity, etc. in any publication/s, you must first furnish the University with a copy of the proposed publication/s so that the University can verify and grant permission for such publication/s to be made publicly available.

Should you require any assistance in conducting your research in regards to access to student contact information please do let us know so that we can facilitate where possible.

Yours sincerely

A handwritten signature in black ink, appearing to read 'A. Shaikjee', written over a faint background of sunflowers.

**DR AHMED SHAIKJEE
MANAGER: STUDENT ADMINISTRATION
OFFICE OF THE REGISTRAR**

Annexure 5: Questionnaire

Determining learner nurses' perceived level of competence and willingness to practice in a maternity unit at a University in the Western Cape Province.

This questionnaire has been designed to measure the perceived level of competence of learner nurses and their perceived willingness to practice in a midwifery setting after completion of the R425 programme. Please complete Sections A, B, C and D.

Section A: Write your age in years (question 1) and tick the relevant box (questions 2-4)

1. Age:years
2. Gender:
 - Female
 - Male
3. Marital status:
 - Single/
 - Married/
 - Divorced/
 - Widow/
 - Stable relationship
 - Other Specify:
4. Previous highest qualification/s before starting nursing programme:
 - Matric
 - College Certificate Specify:
 - College Diploma Specify:
 - Bachelor degree Specify:
 - Other

Section B: Tick the relevant boxes (5 and 6) and write complete questions 5.1 and 6.1

5. Do you plan to work in a Midwifery setting after graduation? Yes No

5.1. Please motivate your answer

.....
.....

6. Do you still have outstanding clinical hours for midwifery? Yes No

6.1 If yes, how many hours are outstanding?

.....
.....

Section C: Example

Circle the number that most accurately reflects your perception regarding the **Key procedures** (listed in column A) in terms of your **Level of competence** (column B) and your **Willingness to practice the procedure** (Column C) using the following keys: 1 very low; 2 low; 3 average; 4 high; and 5 very high.

The example below reflects an average level of competence in terms of tying shoelaces, but a very low willingness to tie shoelaces. Now continue to fill in all the questions (5-16) related to midwifery below.

Key procedures (A)	Level of competence (B)					Willingness to practice (C)				
	Low		high							
Tie a shoelace	1	2	3	4	5	1	2	3	4	5

7. Pelvic assessment	1	2	3	4	5	1	2	3	4	5
8. Vaginal examination	1	2	3	4	5	1	2	3	4	5
9. Starting an intravenous infusion	1	2	3	4	5	1	2	3	4	5
10. Cardiotocograph (CTG) monitoring	1	2	3	4	5	1	2	3	4	5
11. CTG interpretation	1	2	3	4	5	1	2	3	4	5
12. Performing an episiotomy	1	2	3	4	5	1	2	3	4	5
13. Suturing the perineum	1	2	3	4	5	1	2	3	4	5
14. Performing a delivery	1	2	3	4	5	1	2	3	4	5
15. Delivering of a breech	1	2	3	4	5	1	2	3	4	5
16. Delivering shoulder dystocia	1	2	3	4	5	1	2	3	4	5
17. Management of post-partum haemorrhage	1	2	3	4	5	1	2	3	4	5
18. Management of pre-eclampsia	1	2	3	4	5	1	2	3	4	5
19. Neonatal resuscitation	1	2	3	4	5	1	2	3	4	5
20. Counselling of a prevention of mother to child transmission of HIV (PMTCT) mother on treatment before delivery	1	2	3	4	5	1	2	3	4	5

Section D: If you are ready to practice in the following maternity practice areas after graduation choose 1 or 2 if you need more time.

How ready are you to practice in the following maternity practice areas after graduation		
Maternity practice areas	I am ready	Need more time
21. Antenatal ward	1	2
22. Post-natal ward	1	2
23. Theatre	1	2
24. Labour ward	1	2
25. Nursery	1	2
26. Antenatal clinic	1	2
27. Post natal clinic	1	2
28. Maternity Obstetric unit (MDU)	1	2
29. High risk hospital (tertiary)	1	2
30. Low risk hospital (secondary)	1	2

Annexure 6: Permission to use and adapt questionnaire



University of the Western
Cape
School Of Nursing
Private Bag x17
Bellville
7535
Cape Town

10 November 2017

TO: Who It May Concern

I would like to give permission to Isaacs, C (3517755) to utilize the questionnaire I have designed and developed.

Yours Sincerely
Haaritha Boltman-Binkowski

A handwritten signature in black ink, appearing to be 'Haaritha Boltman-Binkowski'.

Lecturer/ Midwifery Co-Ordinator
School of Nursing

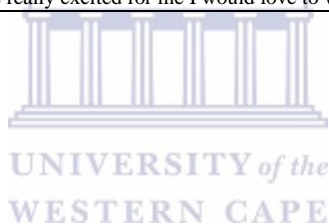
T: +27 21 959 3585
C: 072 800 2011
E: hboltman@uwc.ac.za

Annexure 7: Coding sheet of open-ended question

Coding Sheet of open-ended questions
2. I choose to help women who are pregnant
3. I do not enjoy midwifery and I do not intend to practice in that specific field
4. I love midwifery and I think with more practice I can be more competent
6. Because I love working there and have new challenges everyday
7. I'm so passionate about midwifery, it challenge me, it scare me and it empire me to love this profession even more
8. Still have to study
9. I don't like midwifery
10. I quite do enjoy it
11. I do not find midwifery a type of setting that I can spend time working in and I don't like it
13. I do not like midwifery and it is not my favourite field
14. It's not my favourite field
15. Midwifery is more practical hands on, setting that requires you to know your patients. Strictly monitoring, stages until labour and has a side of a baby as well. Paediatrics
16. I like helping especially when I am working with children(babies)
17. Because I don't feel comfortable with some of midwifery task
18. I truly found midwifery something I truly enjoy. I have had ever enough experience in it to have been able to confidently say I love midwifery
21. I fully enjoyed my experience in midwifery and would like to fill a post there
22. I feel like UWC midwifery course was cramped in a short time period, with many hours, this made me loose interest as I didn't get time to fall "in love" with it
23. I only worked in a MOU for half of by 3 rd years so I would like to work as I find it interesting
25. I do not enjoy midwifery
26. I enjoy the maternity ward, however, if I have a choice midwifery is not my first choice
27. I want to work as a nursing practitioner
28. It is not my goal to work in a midwifery facility/ placement, however, if I have no other options I would consider working there
31. I prefer working as trauma nurse
32. I am very interested in midwifery and one day I would love to specialise on it
33. I would prefer primary health care
34. I just don't like midwifery, could come with a lot of complications
35. Found it so traumatising too see a woman in labour, in a way I am very sensitive
36. I don't like it
37. I have develop a passion for midwifery
38.No- there are to lives in your hand
39. I have found a liking in midwifery
40. I hate midwifery
41. I am not comfortable enough with the process even though I know what to do
42. Further studies
43. Further studies
44. because I find it very interesting and not routine
45. I will work as a midwife in my comm serve year however I plan to further my studies thereafter
46. Not interested in midwifery
48. Love midwifery, it's exciting and I'm passionate about it
49. not interested
50. it has a lot of risk and care for 2 persons in once
51. I enjoyed watching and helping bring new life into the world
53. It is an interesting field and I would like to learn more
54. I like the working environment
55. It has the same environment as trauma, that is why I would only work labour side
57. During low risk I was a student learnt a lot and would like to broaden my knowledge in advance midwifery
60. I did not enjoy midwifery
61. Due to lack of exposure to competency
62. Because it is interesting and you learn new things everyday
63. I feel more competent in community
64. Being part of ushering life into the world are my joy. It also require a lot of input from RN
65. I love and feel competent and comfortable in working / doing midwifery
67. I don't feel to competent about it
68. I enjoyed the midwifery experience
69. Enjoyed the experience and new things learnt
70. I was most competent in labour ward and antenatal
71 I like to work in midwifery
73. It has been an amazing experience for me
74. Do not like midwifery
75. Not my personal choice
76. I found midwifery interesting and real
77. It's not so related to ill patients

78. I did not like it it's not for me
80.I love midwifery, you deal with sick people and the joy of delivery is extinct
82. Unsure but if I get placed at a midwifery facility. Yes
83. It's too risky
85. Does not interest me
87. I found midwifery to be difficult
90. I enjoyed handling the delivery and labour process especially MOU level
92. Passionate about maternal and neonatal care
94. Not by choice
95. I enjoyed working as a midwife
96. I like the idea of delivering babies
98. love to work in labour ward, because the one moment the fetus Is outside and the next crying outside
99. Midwifery days was limited working in the ward , feel not competent need more exposure
100. Because I love midwifery
101. I would love to work there as I am witnessing the begging of life but midwifery is my second choice
102. Midwifery give me the sense of independence
103. uninterested
104.It's interesting more learning
105. If their place me in midwifery setting I will work there because I did enjoy my midwifery placement. Did learn a lot
106. I do like midwifery but it would be one of my last options it is not an environment I would spend months in
107. Its action packed. Exciting unpredictable cases occur daily
108. Do not feel competent enough. Hated the discipline done to feeling ill equipped in practical management of labour. Everything is done theoretically mainly, majority of prac experience left to ward, sisters not always good teachers
109. I love midwifery it forms the best part of my training
110. Midwifery is not my first choice but if I get place there I would not mind. I enjoyed midwifery in the clinic more than the hospital
111. It is interesting
113. Because I love midwifery and delivering babies and the responsibilities
114. Because I like midwifery I just have a passion for it
115. I really enjoyed working in low risk midwifery. It's very hands on
116. I enjoyed midwifery but would go where I am place
117. Midwifery is one of the 3 option I am currently enjoying
118. Will if I have to it is to intrusive
119.I enjoy working midwifery
120. Because it is where I can save lives and I can be in charge of what I am doing
121. I think that I need more experience before working in midwifery setting. The responsibility in the midwifery setting is more than in general
122.I am confident to work in maternity but midwifery is not interesting
123.If I can work in a primary health care setting it would be nice midwifery my second choice
124. I enjoyed midwifery and that is a definite option when I finish
125. I enjoyed working in maternity unit during my placement and it just fascinates me
126. I have a passion for midwifery and love to take care of baby antepartum intra and post
128. personal reasons
129. I find midwifery interesting and enjoyed being a midwife
130 I'm interested in working in a midwifery setting I love it when I was working
131. I enjoyed working at in maternity unit
132. I feel competent and confident to work in midwifery setting
133. I would like to get 1 year extra experience but do not want to do it long term
134. I would like to work in trauma
135. Would like to get a chance to work as a sister and practice without limitations
136. I have no problem with midwifery setting its okay but not for me
139. I would prefer to work in trauma
140. Being a midwife inspire me I felt old about it just easy to do
141. I have a passion for midwifery
142. planning on doing advance midwifery
143. my preference oncology
144 I prefer the icu and theatre setting
145. although I love midwifery I would like to work in a clinical setting
147. well midwifery was so interesting for me, I learned something new every day it motivated me to love my anatomy and human body even more
148. labour pains ... especially the baby crying and not liking what I am saying
149. I always wanted to be a midwife in the facilities I enjoyed it even when I was tired
150 I love midwifery I enjoyed it
151. I will have to work in midwifery if necessary but midwifery is not my first choice because I do not feel comfortable
152. I like to help mothers especially when they are in labour
153. I will apply if no other post are available
154. I enjoyed theatre and gynaecology and obstetrics unit
155. This would not be my first choice if I get place there As a com serve would cope
156. I really love midwifery enjoyed my midwifery training

157. the level of risking a patients life is higher at stake and for someone that only had 6 moths of experience I feel like I would not be able to handle it
159. Very interesting field to work in
160. Personally I think midwifery is the kind of setting where you learn a lot and your knowledge will constantly enhanced
161. hopefully it would be a field I will excel at
162. I enjoyed working midwifery and plan on studying advanced midwifery
163. I just don't enjoy the work it's also a high risk area
164. I want more exposure after graduation
165. I want to do advance midwifery and work in a high risk facility NSH first +-5 years
166. Working with pregnant women is always unpredictable even if you are skilled you never know what to expect my interest is trauma
167. Midwifery is not what I want to do my masters in
168. But only in low risk institutions mou
169. This is an interesting speciality that I learned to love it grew on me
171. Because it is interesting
172. Because I love midwifery is very interesting I love to solve problems so midwifery is the way to go
173. Midwifery is one of the settings I most enjoyed. A lot more to learn but willing to do it
174. I am not passionate about midwifery
176. I enjoyed my placement and learned more to motivated me to study further in the field
177. I did not enjoyed it I don't think I can be a good midwife
178. I am passionate about delivering babies though midwifery is interesting but I have another field of study I am passionate about
179. Midwifery is interesting but it is not my thing that I can continue with
180. I enjoy working in midwifery setting its exciting and challenging and enthusiastic way
181. It's interesting and enjoy
182. I like to work in general ward
183. To gain more experience as I want major in it
184. It is very interesting field and I would like to attain higher qualification in the field
185. Due to low ratio of males in the department also one day I wish to study obstetrics
186. As a xhosa man and traditional am my allowed to continue midwifery side
187 I love bring babies into the world midwifery is really excited for me I would love to work in the mou



Annexure 8: Editorial report

ACADEMIC EDITOR



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9 December 2017

To whom it may concern

I hereby submit this letter to verify that I have edited Charlene Isaacs' mini-thesis proposal "Determining learner nurses' perceived levels of competence and willingness to practise in a maternity unit at a university in the Western Cape Province" for the Degree of Masters in Advanced Midwifery and Neonatology.

The editing process included copy-editing, proofreading, and formatting, which was done with special attention to meeting the guidelines for formatting, structure and referencing as set out in the *University of the Western Cape Thesis Guide* and the *APA referencing guide*.

Working as a book editor, I have more than 10 years experience working for various publishing companies, which include Maskew Miller Longman, Cambridge University Press, Oxford University Press, and New Africa Books. Currently, I am a freelance editor for Oxford University Press Southern Africa, Higher Education section.

For more information about my professional profile, please refer to my LinkedIn page.

Yours sincerely

RAbrahams

Ms Revenia Abrahams