



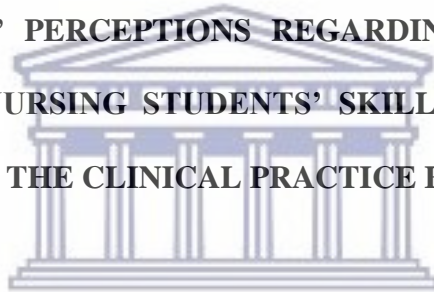
**UNIVERSITY of the
WESTERN CAPE**

UNIVERSITY OF THE WESTERN CAPE

Faculty of Community and Health Sciences

School of Nursing

**CLINICAL SUPERVISORS' PERCEPTIONS REGARDING THE FACTORS THAT
PROMOTE OR INHIBIT NURSING STUDENTS' SKILLS TRANSFER FROM THE
SKILLS LABORATORY TO THE CLINICAL PRACTICE ENVIRONMENT**



**UNIVERSITY of the
WESTERN CAPE**

A thesis submitted in fulfilment of the requirements for the degree Magister Curationis in School
of Nursing, Faculty of Community and Health Sciences, University of the Western Cape

Student name: Zenobia Heradien

Student number: 9544511

Supervisor: Professor F Daniels

Date: May 2019

KEYWORDS

Clinical Learning

Clinical Placement Environment

Clinical Practice Environment

Clinical Supervisor

Competency

Learning Needs

Nursing student

Perception

Practice Environment

Real Life Setting

Real Practice

Skills Laboratory



LIST OF ABBREVIATIONS

SANC:	SOUTH AFRICAN NURSING COUNCIL
CLE:	CLINICAL LEARNING ENVIRONMENT
HEI:	HIGHER EDUCATION INSTITUTION
PBL:	PROBLEM BASED LEARNING
BNUR:	BACHELOR OF NURSING




UNIVERSITY *of the*
WESTERN CAPE

DECLARATION

I declare that **Clinical supervisors' perceptions regarding the factors that promote or inhibit nursing students' skills transfer from the skills laboratory to the clinical practice environment** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.

Student: Zenobia Heradien

Signature: 

Student number: 9544511

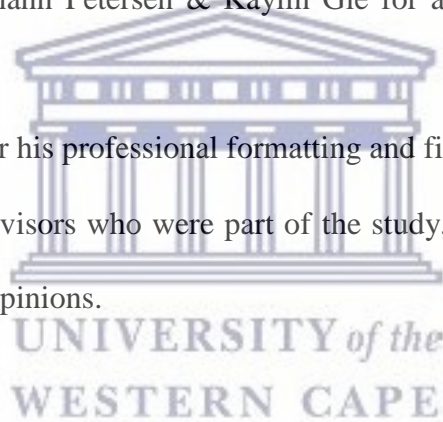
Date: May 2019



ACKNOWLEDGEMENT

My sincere thanks and appreciation to the following people for making this study what it is:

- Professor F Daniels, my supervisor, who has been persistent in her approach of guidance, support and patience.
- My husband and best friend Denovan Heradien, for his love, patience, support and words of encouragement, who stood by my side with every obstacle I have encountered during the times when my levels of perseverance were low.
- To my work colleagues, for their assisting role and contribution to my studies.
- A huge thanks to Meghann Petersen & Kaylin Gie for assisting me with the technical formatting of document.
- To Mr. Gareth Lowe, for his professional formatting and finalising of the thesis.
- To all the clinical supervisors who were part of the study, who sacrificed their time and shared their views and opinions.



DEDICATION

TO MY ALMIGHTY GOD, WITH WHOM ALL THINGS ARE POSSIBLE

MATT 19:26

&

“To my Mother for the sacrifices she made for my basic education, which enabled me to

succeed in life”



UNIVERSITY *of the*
WESTERN CAPE

ABSTRACT

Background: Nursing as a profession is based on firm knowledge, values, clinical skills and attitudes. In the current dynamic healthcare system nursing students are challenged to be insightful and have clinical reasoning and psychomotor skills in order to apply theory to practice. Clinical teaching is therefore considered an essential part of the undergraduate nursing curriculum, as it provides the opportunity for students to apply theory to practice in the skills laboratory and then to transfer it into real life situations. Nursing students spend time in the clinical practice environment learning the skills and values of the nursing profession, with the goal of achieving the clinical learning outcomes, as prescribed by their nursing education institution and the South African Nursing Council. During this time nursing students depend on the support of clinical supervisors and nursing staff in the clinical practice environment to meet their learning outcomes.

Clinical supervisors for the undergraduate nursing programme, at the university included in the study, are tasked with clinical teaching in the skills laboratory, supervision of nursing students in clinical practice and assessment of learning. Nonetheless, there are challenges ascertained by the clinical supervisors, which inhibits students from achieving their learning outcomes.

Purpose of the study: The purpose of the study was to explore and describe the clinical supervisor's perception of students' skills transfer from skills laboratory to the clinical environment.

Objectives: The objectives of this study were:

- i) To explore the perceptions of clinical supervisors regarding nursing student's skills transfer from the skills laboratory to the clinical practice environment.

- ii) To explore the perceptions of clinical supervisors regarding the challenges experienced during student's skills transfer from the skills laboratory to the clinical practice environment.

Research methods: A qualitative approach and an exploratory and descriptive design was used. The target population was the clinical supervisors employed by a university in the Western Cape. Non-probability, purposive sampling of 12 participants was done. Data was collected through semi-structured interviews, using an interview guide and probing question to gain detailed information. Interviews were audio-recorded to ensure that no information would be lost and the researcher could review it when necessary. Content analysis was used to analyse the data.

Findings: Three themes were generated from the data: Factors that promoted skills transfer were related to the clinical education process and student learning; factors in clinical practice environment that inhibited the transfer of skills from the skills laboratory to the clinical practice environment; and challenges related to the skills laboratory that inhibited the transfer of skills from the skills laboratory to the clinical practice environment.

The findings in the study found that nursing students experience challenges in transferring skills learned in the skills laboratory to the clinical practice environment. The results show that there was a disconnect between what was learnt in the skills laboratory and what was actually experienced in the clinical practice environment. The findings also indicate that clinical supervision of students should be in place and should include appropriate orientation and supervision of nursing students in the skills laboratory as well as in the clinical practice environment. The findings reveal that innovative clinical teaching methods used by clinical supervisors is essential to promote learning outcomes. The findings show that the clinical

practice environment is not adequately prepared for nursing students to achieve their clinical outcomes, which is a cause for concern.

Ethics: All principles of the research ethics were adhered to. Permission to conduct the study was obtained from the Registrar of the university. The university research ethics committee granted ethics approval of the study. All the participants were involved in the study on a voluntary basis. Informed consent and confidentiality binding forms were voluntarily completed by the participants.

Conclusion: Clinical teaching is an obligatory part of nursing education. It can be challenging and demanding for the nursing students. Due to its complexity, it is essential for the nursing students to be exposed to a variety of real life situations within their training, in order to better prepare them for quality clinical practice. Nursing students therefore require adequate support from the nursing staff in the clinical practice environment and clinical supervisors, to acquire the necessary skills, knowledge and attitude to perform nursing duties with competence and confidence. This calls for combined attention from the higher learning institutions and the clinical settings towards supporting students with the smooth transfer of skills learned in the skills laboratory to the clinical practice environment.

TABLE OF CONTENTS

KEYWORDS	i
LIST OF ABBREVIATIONS.....	ii
DECLARATION	iii
ACKNOWLEDGEMENT	iv
DEDICATION.....	v
ABSTRACT.....	vi
TABLE OF CONTENTS.....	ix
LIST OF FIGURES	xv
CHAPTER ONE.....	1
OVERVIEW OF THE STUDY	1
1.1 Introduction and Background	1
1.2 Problem statement.....	5
1.3 Research questions.....	6
1.4 Study purpose.....	6
1.5 Study objectives	6
1.6 Significance of the study.....	7
1.8 Theoretical framework.....	11
Figure 1: Kolb’s experiential learning cycle.....	11
1.9 Outline of the study.....	15



UNIVERSITY of the
WESTERN CAPE

1.10 Summary	16
CHAPTER TWO	17
LITERATURE REVIEW	17
2.1 Introduction.....	17
2.2 Clinical supervision and student support	17
2.3 The role of the South African Nursing Council in clinical nursing education	20
2.4 Clinical practice environment and challenges experienced by nursing students	22
2.5 Clinical skills laboratories.....	25
2.6 Conflicting practices in nursing education	27
2.7 Learning resources in the clinical practice environment	29
2.9 Summary	32
CHAPTER THREE	33
RESEARCH METHODOLOGY.....	33
3.1 Introduction.....	33
3.2 Research approach and design	33
3.3 Research approach	33
3.4 Research design	34
3.4.1 Exploratory research	34
3.4.2 Descriptive research.....	35
3.5 Research setting	35



UNIVERSITY of the
WESTERN CAPE

Table 3.1: Assignment of clinical supervisors to the various years of study.....	36
3.6 Research population.....	37
3.7 Sampling technique and sample size	37
3.7.1 Inclusion criteria	38
3.8.1 Data collection instrument.....	38
3.8.2 Probing.....	39
3.8.3 Pilot interview	39
3.8.4 Data collection process	40
3.9 Data Analysis	40
3.9.1 Organisation and preparation of data.....	41
3.9.2 Developing an overview of the research.....	41
3.9.3 Coding of the data.....	41
3.9.4 Presenting the findings.....	42
3.9.5 Interpretation of the findings	42
3.10 Rigor for qualitative data	42
3.10.1 Trustworthiness.....	43
3.10.2 Dependability.....	43
3.10.3 Credibility	43
3.10.4 Transferability.....	45
3.10.5 Authority of the researcher	45

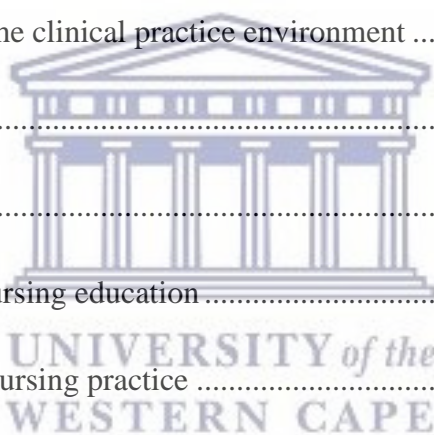


UNIVERSITY of the
WESTERN CAPE

3.10.6 Confirmability.....	46
3.10.7 Reflexivity.....	46
3.12 Summary.....	50
CHAPTER FOUR.....	51
FINDINGS AND DISCUSSIONS	51
4.1 Introduction.....	51
4.2 Demographic.....	51
Table 4.2: Themes and categories from semi-structured interviews with clinical supervisors	53
4.3 Presentation and discussion of themes and categories.....	55
4.3.1 Theme 1: Factors that promoted skills transfer were related to the clinical education process and student learning	55
4.3.1.1 Category 1: Demonstration in the skills laboratory	55
4.3.1.2 Category 2: The use of teaching aids to integrate theory into practice in skills laboratory	56
4.3.1.3 Category 3: Self-directed learning in skills laboratory is essential to monitor students' learning process	58
4.3.1.4 Category 4: Guided practice in the skills laboratory was perceived important for improvement of motor skills.....	60
4.3.1.5 Category 5: Students experienced learning in small groups in the skills laboratory to be effective and hands on.....	62

4.3.1.6 Category 6: Nurse’s Grand Round regarded as useful for discussion of patient diagnosis, nursing care and management.....	63
4.3.2 Theme 2: Factors in clinical practice environment that inhibited the transfer of skills from the skills laboratory to the clinical practice environment	64
4.3.2.1 Category 1: Practices in the skills laboratory and clinical practice environment viewed as conflicting	65
4.3.2.2 Category 2: Limited clinical learning opportunities to practise nursing skills	69
4.3.2.3 Category 3: A language barrier exists among students and clinical staff	71
4.3.2.4 Category 4: Negative attitude of nursing staff in the clinical practice environment	73
4.3.2.5 Category 5: Students are used as part of the workforce in the clinical practice environment	75
4.3.2.6 Category 6: Clinical practice environment is overcrowded with students competing for learning opportunities.....	76
4.3.2.7 Category 7: High rate of student absenteeism from the clinical practice environment	78
4.3.3 Theme 3: Challenges related to the skills laboratory that inhibited the transfer of skills from the skills laboratory to the clinical practice environment	80
4.3.3.1 Category 1: Skills laboratory is overcrowded.....	80
4.3.3.2 Category 2: Demonstration equipment in the skills laboratory is outdated.....	83
4.4 Summary	85
CHAPTER FIVE	86

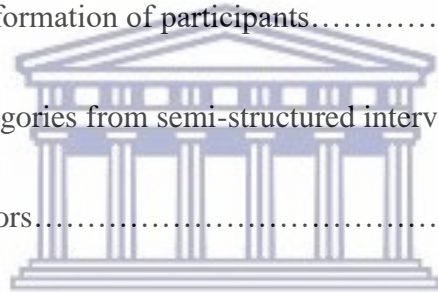
SUMMARY OF FINDINGS, RECOMMENDATIONS AND LIMITATIONS	86
5.1 Introduction.....	86
5.2 Summary of the findings.....	86
5.2.1 Theme 1: Factors that promoted skills transfer were related to the clinical education process and student learning	87
5.2.2 Theme 2: Factors in clinical practice environment that inhibited the transfer of skills from the skills laboratory to the clinical practice environment	87
5.2.3 Theme 3: Challenges related to the skills laboratory that inhibited the transfer of skills from the skills laboratory to the clinical practice environment	89
5.2.4 Summary	90
5.3 Recommendations.....	90
5.3.1 Recommendation for nursing education	90
5.3.2 Recommendations for nursing practice	91
5.3.3 Recommendation to research.....	93
5.4 Limitations	94
5.5 Summary	94
REFERENCES	95
APPENDIX 1: INTERVIEW GUIDE.....	107
Private Bag X 17, Bellville 7535, South Africa.....	107
APPENDIX 2: INFORMATION SHEET	108



Private Bag X 17, Bellville 7535, South Africa.....	108
APPENDIX 3: CONSENT FORM	113
Private Bag X 17, Bellville 7535, South Africa.....	113
APPENDIX 5: EDITORS EDITING LETTER	115

LIST OF TABLES

TABLE 3.1: Assignment of clinical supervisors to the various years of study.....	36
TABLE 4.1: Demographic information of participants.....	52
TABLE 4.2: Themes and categories from semi-structured interviews with clinical supervisors.....	53



UNIVERSITY of the
WESTERN CAPE

LIST OF FIGURES

FIGURE 1.1: Kolb's experiential learning cycle.....	10
--	----

CHAPTER ONE

OVERVIEW OF THE STUDY

1.1 Introduction and Background

Nursing is a practice-based profession and the importance of clinical teaching in nursing education cannot be over-emphasized. Gaberson and Oermann (2010) state that clinical teaching is the most important component of nursing education, more so than classroom teaching, and is therefore regarded as an integral part of the undergraduate nursing curriculum. Nursing education is driven by two components, namely the theoretical aspect, which is the knowledge that is provided in the classroom, and the clinical component, where nursing students are placed in the clinical practice environment for experiential learning. The clinical component involves exposure to clinical situations where nursing students apply theory to practice and are given a platform to demonstrate the values and skills of the nursing profession learned in the skills laboratory. Therefore, by the end of their training, nursing students are expected to be independent critical thinkers who are proficient and efficient in making sound clinical decisions and portray safe clinical practice.

Education and training of student nurses should be organized in such a way that students are trained, mentored and provided with facilities and opportunities for learning. When student nurses follow the education and training programme, they should be able to adapt to the changing clinical practice environment, think critically and creatively thereby becoming independent practitioners of nursing. The quality of nursing education and training should prepare nursing students to function in different clinical practice environments such as general hospitals, private homes, community clinics and specialized units. A dynamic work environment

requires that nursing students function with responsibility and accountability and have the ability to transfer skills they have learned in the skills laboratory to the clinical practice environment. The goal of nursing education is to produce a nurse who is competent (Bruce, Klopper, & Mellish, 2011).

The specific university under study trains undergraduate nursing students to become competent nurses in the nursing profession with the aim of preparing nursing students to be able to provide care to patients from different backgrounds. The major competencies include communication, assessment, patient care and leadership. Communication involves effective communication with the multi-disciplinary team with regard to patient care and treatment, and assessment includes being able to perform comprehensive patient assessment on admission through to the rehabilitation of a patient, to ensure that the patient's needs are identified and relevant care is provided.

Nursing is a vital profession and the practice experience in the clinical learning environment is a fundamental component in the training of the undergraduate nursing student. For the Bachelor of Nursing (BNUR) student, the clinical practice environment is where the world of nursing comes alive. Learning experiences within clinical practice present opportunities for the application and integration of theoretical knowledge and skills, together with unique opportunities for developing therapeutic relationships that are patient-centered (Levet-Jones & Lathlean, 2008; Mannix, Wilkes, & Luck, 2009). The clinical practice environment experience is an exciting and anticipated opportunity to become familiarised with the professional practice of nursing. Health care is continually changing and becoming more challenging. Drivers of these challenges include: evolving technology, current trends in nursing and staff shortages. These pressures affect the clinical practice environment that students enter and can alter the student's perception,

resulting in the clinical practice environment being an area that is challenging and unfamiliar. The nursing student faces working with unfamiliar nursing staff who are an established team, carrying out personal care for patients, while improving their interpersonal skills and receiving formative/summative feedback on whether he or she is reaching the level of competency expected. The nursing students at this specific university are expected to be supported by an experienced Registered Nurse who provides supervision and instruction.

Goodrick and Reay (2010) state that the clinical supervisors' and nurse educators' roles in the nursing profession are vital because they are responsible for training nursing students, instilling professional values, and transferring knowledge in class. According to Bruce and Johnson (2019), the combination of knowledge and practical skills are essential for nursing education. Furthermore, Bruce and Johnson (2019) has argued that a gap still exists between the theoretical aspects of nursing education and clinical practice in the clinical environment.

Thus, while the teaching of theory occurs in the classroom and is critical for knowledge acquisition in their field of study, the practical skills or "hands on" component occurs in a hospital and allows for skills assessment, competency and exposure to an environment where learning can take place. For this to occur, certain procedures need to be followed which include: firstly, within the university environment, nursing students practice clinical skills on simulated patients and simulation mannequins in the skills laboratory under supervision of the clinical supervisor, to develop confidence. Bruce and Johnson (2019) indicates that nursing students experience difficulties with scenario-based simulation, but feel safe in the practical laboratory. In addition, nursing students pointed out that after they have accomplished the practical skills in the skills laboratory, their confidence continued to develop during their clinical placement; and secondly, nursing students enter the wards with specific learning objectives set out by the clinical

supervisor for further learning processes and obtaining clinical skills competencies. The purpose of these objectives are to ensure that all required practical skills and competencies are assessed and evaluated by the registered nurse and clinical supervisors before the end of each placement in the various wards. According to Lekhuleni, Van der Wal, and Ehlers (2014) registered nurses should create practical opportunities for nursing students to achieve their learning objectives.

In South Africa, nursing students are required to undergo a four year full-time degree or diploma programme in order to qualify as a professional nurse. During the training programme a minimum of 4000 hours of supervised experience in the clinical practicum is mandatory (South African Nursing Council Regulations No. R4250). The Nursing Education Institution (NEI) at which the nursing student is registered is responsible for the submission of evidence of the student's competence in theoretical and clinical learning. This has to be submitted to the South African Nursing Council (SANC) on completion of the student's training in order for them to be registered as professional nurses. As an employee of the NEI, it is the responsibility of the clinical supervisor and nurse educator to ensure that nursing students attain these requirements.

In the nursing education institution where this research was conducted, undergraduate nursing students' clinical teaching occurs in the skills laboratory and in the clinical practice environment. With regard to nursing skills, there is a clinical supervisor who is responsible for the accompaniment of the students in the clinical learning environment. Demonstrations of nursing skills are performed in the skills laboratory prior to placement of students in the clinical practice environment. In the academic hospital where students are placed for their clinical competency, registered nurses from each department are expected to teach nursing students during their placement in the clinical practice environment when the clinical supervisor from the nursing institution is not present. The researcher, in her capacity as a clinical supervisor at this specific

university, has observed differences in the demonstrations and assessments conducted by nursing staff in the clinical practice environment and those conducted by clinical supervisors in the skills laboratory. A technique which is demonstrated differently or incorrectly by either supervisors or nursing staff, may have implications for the standard of nursing care provided by the students. It is therefore valuable to explore the perceptions of clinical supervisors regarding students' skills transfer from the skills laboratory to the clinical practice environment.

1.2 Problem statement

Development of a theoretical knowledge base, often addressed in a classroom context, is critical in the field of nursing. Clinical skills development or “hands on practice” and the assessment of clinical competency mainly occurs in the clinical practice environment or health facilities used for clinical learning. Bruce and Johnson (2019) point out that theoretical knowledge is fundamental and serves as the foundation for embarking on clinical skills development through simulation. To develop student nurses' clinical competency, certain procedures need to be followed, which include nursing students practicing clinical skills on simulation mannequins and simulated patients in the clinical skills laboratory under supervision of the clinical supervisors as well as in the real-life setting of the clinical learning environment.

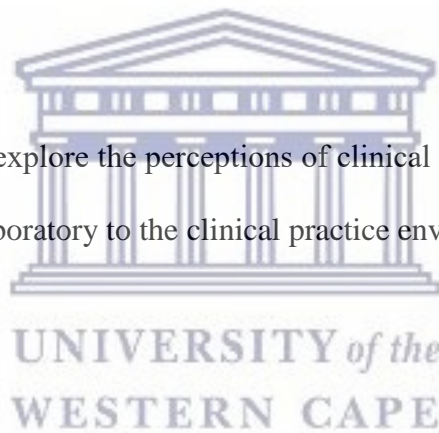
However, anecdotal evidence of students not being able to integrate theory with practice is still being reported. Clinical supervisors at the university where this study was conducted work closely with nursing students and their perceptions of students' skills transfer from the skills laboratory to the clinical practice environment is crucial, but has previously not been explored.

1.3 Research questions

- i) What are the factors related to the clinical teaching approach that promote nursing student's skills transfer from the skills laboratory to the clinical practice environment?
- ii) What are the factors related to the clinical teaching approach that inhibit nursing student's skills transfer from the skills laboratory to the clinical practice environment?
- iii) What are the specific challenges with regard to the teaching and learning process that inhibit transfer of skills from the laboratory to the clinical practice environment?

1.4 Study purpose

The purpose of this study is to explore the perceptions of clinical supervisors regarding students' skills transfer from the skills laboratory to the clinical practice environment.



1.5 Study objectives

The objectives of this study are:

1. To explore the perceptions of clinical supervisors regarding nursing students' skills transfer from the skills laboratory to the clinical practice environment.
2. To explore the perceptions of clinical supervisors regarding the challenges experienced during nursing students' skills transfer from the skills laboratory to the clinical practice environment.

1.6 Significance of the study

The findings of this study might benefit the nursing education programme as it could be utilized to improve clinical teaching and learning. Challenges that inhibit the transfer of skills, if shared by participants, could be addressed, while those that promote skills transfer can be strengthened. Clinical supervision of students can be improved and students should experience better support from those supervising them in the education institution and in clinical practice. Improving clinical training and the transfer of skills from the skills laboratory to the clinical practice environment could ultimately be beneficial for patient care and the improvement of patient outcomes.



1.7 Operational definitions of key concepts

Challenges - refers to things that test someone's ability and needs great physical and mental effort in order to be performed successfully (Cambridge Advanced Learner's Dictionary, 2013).

In the context of this study, challenges refer to difficulties which student nurses encounter while transferring skills learned in the skills laboratory to the clinical practice environment.

Clinical practice Environment - refers to a health care environment where students are placed to transfer theory to practice and develop clinical nursing skills in a real-life situation, under the guidance of an experienced professional (Bruce et al., 2011). The concept is used as such in this study.

Clinical supervision - is a formal process of professional support and learning which enables individual practitioners to develop knowledge and support (Mellish & Paton, 2010). In this

study, clinical supervision is defined as the assistance provided to undergraduate nursing students in a clinical practice environment to develop clinical skills and competency.

Clinical Supervisor - is a person who has the task of supporting and guiding students to become independent professionals (Malone, 2009). The concept clinical supervisor and clinical facilitator are often used to refer to the same function. However, in this study, a clinical supervisor is a Registered Nurse who is employed by the School of Nursing to facilitate clinical skills development and to supervise a group of nursing students during their clinical placement in the clinical setting (Archer & Van Heusden, 2011).

Competent - refers to a level whereby an experienced employee is able to perform a task by appropriately using measuring tools, knowledge, skills and attitude.

Inhibit - to prevent someone from doing something by making them feel nervous or embarrassed (Cambridge Advance Learner's Dictionary, 2013). In this study, inhibit refers to restrictions or limitations experienced in the clinical practice environment.

Learner nurse or student - is any person who is registered with the SANC, who has complied with the prescribed conditions and has furnished the prescribed particulars for a nursing programme at a nursing education institution (The South African Nursing Council, Act No.33, 2005:27).

Learning objectives - define the practical and theoretical outcomes that nursing students who enter the clinical learning environment must acquire in order for them to demonstrate that learning has taken place.

Skills laboratory - is a safe environment where students are able to practice procedures and gain competence to perform these procedure on a real patient (Traut, 2013). The skills laboratory assists with bridging the gap between the classroom and the clinical environment. In this study, a skills laboratory is a dedicated on-campus and off-campus facility that replicates the real-life clinical setting and is used for development of student's clinical skills in a simulated manner.

Nursing student - is a person who is "following a programme of study in a nursing education institution" (Nursing Act No.33 of 2005). In this study, a nursing student refers to an individual who is registered at a South African Nursing Council (SANC) accredited institution for the four and five year Bachelor of Nursing programme in order to be registered as a professional nurse.

Perception - has two components, namely concept and belief. Perceptions are grounded in a productive and developing connection between the mind and world (Copenhaver, 2018; Donough, 2014).

Promote- In this study promote is the intend to support or create a better understanding for the nursing student of the transferal of skills from the skills laboratory to the practice environment. (Cambridge Advance Learner's Dictionary, 7th Edition).

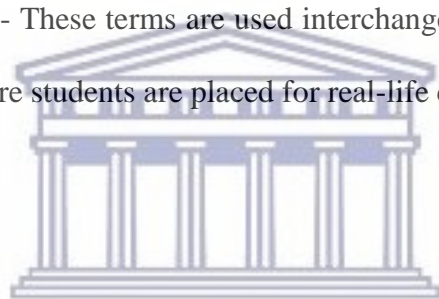
Registered Nurse - a person who has the qualification and competence to independently practice comprehensive nursing, ensuring responsibility and accountability for their practice and is registered with the Nursing Council as a professional nurse (Nursing act 2005:25).

The South African Nursing Council - is a statutory body that governs nursing practice in South Africa (The Nursing Act, 2005).

Transfer - In the context of this study, transfer refers to learning in one context and applying it to another, i.e. the ability of the nursing students to apply acquired knowledge and skills to new situations. (Cambridge Advanced Learner's Dictionary, 7th Edition).

University - also known as a higher education institution, a university is described as any institution that provides higher education on a full –time, part-time or distance basis, which has been merged, established, declared or registered as a higher education institution (Nursing act 50 of 1978).

Clinical placement environment, real practice, practice environment, clinical practice environment, real-life setting - These terms are used interchangeably in this study and all refer to the clinical environment where students are placed for real-life clinical learning.



UNIVERSITY *of the*
WESTERN CAPE

1.8 Theoretical framework

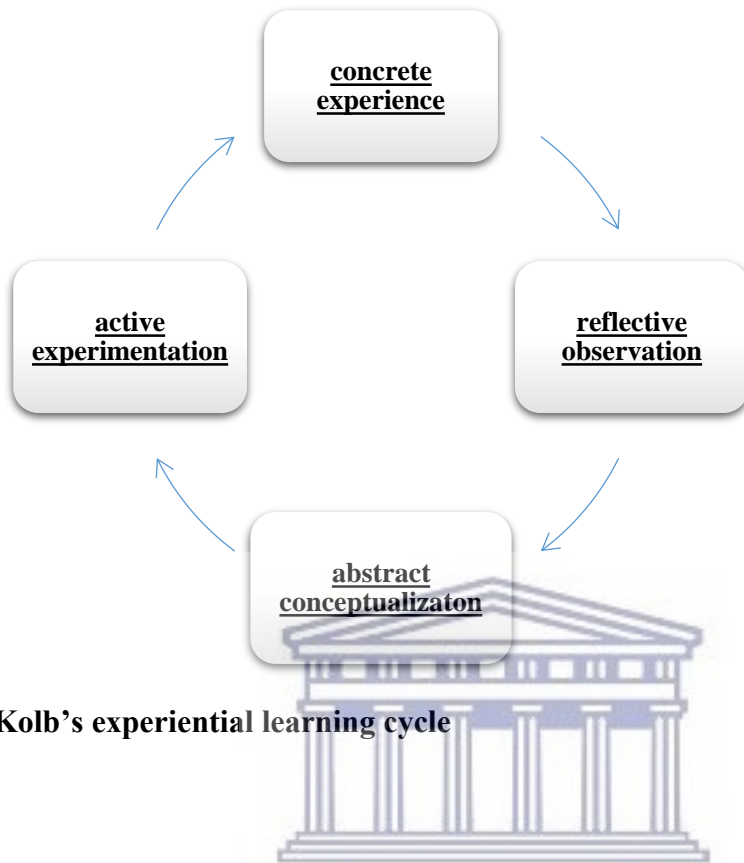


Figure 1: Kolb's experiential learning cycle

Figure 1 illustrates Kolb's cycle which consists of four stages, including concrete experience, reflective observation, abstract conceptualization and active experimentation.

The conceptual framework for this study was based on Kolb's experiential learning cycle. Kolb (2000:2) provides a holistic model of the learning process. This process and model are consistent with what we know about how people learn, grow and develop. The theory is called 'Experiential Learning' to emphasise the central role that views and experiences play during the learning process. Recognizing that nursing is a practice based profession, experiential learning theory and service learning emphasize learning by doing and reflection. According to the theory, learning is enhanced when students are actively involved in gaining knowledge through experience that includes problem solving and decision making.

Kolb (2000:3) states that the learner student ought to continually choose which set of learning abilities he or she would use in a specific learning situation. In acquiring experience, some people perceive new information by experiencing the concrete, tangible, felt qualities of the world while relying on their senses and immersing themselves in concrete reality.

Kolb (1984) proposed the following six characteristics of experiential learning:

Learning is a process rather than an outcome - To facilitate learning, students must be engaged in a continuous learning process that does not end once outcomes and performances are achieved, but is a lifelong process. There should be a continuous transferal of new experiences through reflection and feedback on their learning, thus generating new knowledge .Since nursing is dynamic, lifelong learning is required for nurses to respond to different situations (Kolb,1984).

Learning is a holistic process - Learning from experience should be aimed at changing the student as a whole, including feelings, thinking, behaviour, perception and adaptation to the world, and not only through attainment of cognitive knowledge. Given the importance of this in nursing, experiential learning is useful in facilitating behavioural and effective learning (Kolb, 1984).

All learning is re-learning - Learning from experience should be organised around students' ideas, beliefs and previous experience in their lives as well as those gained in the clinical environment, classroom and skills laboratory which are analysed and integrated into new experiences, thereby facilitating clinical learning (Kolb, 1984).

Learning is interactive - Students have to interact not only with the nurse educators, but with those around them. Students are required not only to interact but also develop relationships with each other, their clients, their patient as well as the overall environment. Through discussions,

presentations, simulations and decision making, new experiences emerge, thereby resulting in clinical learning (Kolb, 1984).

Learning is analytic - Experiential learning is based on the student's ability to analyse, contrast and differentiate the situation and come up with new ideas, concepts and actions. Additionally, learning occurs when there is reflection on the chosen experiences. For students to be able to reflect on their experiences, they need feedback from supervisors (Kolb, 1984).

Learning is a process of creative knowledge - Experiential learning is viewed as a transaction between social and personal knowledge which assists individual growth. Individual development increases confidence, self-esteem, personal value and lifelong learning (Kolb, 1984).

Experiential learning differs from other behaviourist theories on which traditional teaching methods are based because of the important role experience plays in learning (Kolb, 1984). This experience through reflection facilitates students in acquiring critical thinking and clinical judgement skills which are lacking in most students when they qualify (Williams & Bihan, 2012).

Kolb (1984), viewed learning as “the process whereby knowledge is created through the transformation of experiences. Learning is a continuous process which entails the creation of knowledge through transforming experience in the form of changing a person's behaviour, feelings and thinking”. According to Kolb (1984), theory is cyclic in nature. Students have to go through the cycle multiple times in order to improve their skills. Student nurses learn best by means of experiential learning. Kolb's theory describes experiential learning as a cyclic process that begins anywhere in the cycle but follows a specific sequence for acquisition of knowledge based on experience. Kolb's Experiential Learning Theory and Model (2000) is a foundation for

the practice integration method designed to provide a critical thinking experience. Kolb's cycle consist of four stages, including concrete experience, reflective observation, abstract conceptualization and active experimentation.

Concrete experience - Students take their experiences gained from the classroom and practiced in the simulation laboratory into the real situation in the clinical setting by being involved in doing a particular action, thus integrating theory and practice. However, for students to achieve this, they require clinical learning opportunities and involvement in the tasks that are carried out in the clinical learning (Kolb, 1984).

Reflective observation - Students make an observation and reflect on the experience that they have gone through from different angles, understand the effect and significance of the experience and anticipate the consequences if the same is repeated.

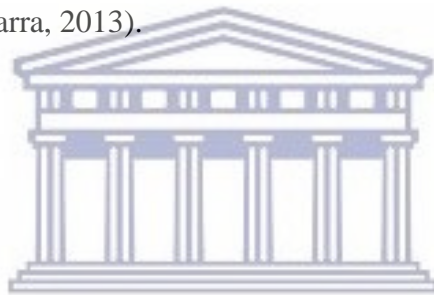
Abstract conceptualization - Students analyze the experiences and create concepts and general principals from their observations and construct their own meaning of the whole experience. They start to make connections between their experiences and how they can apply them in a different situation (Kolb, 1984).

Active experimentation - The students apply the general principles in the situations they may come across while making decisions and solving problems, thereby gaining new experiences (Kolb,1984).

This learning cycle will be used to analyse the data gathered to understand how skills can be transferred from the skills laboratory to the clinical practice environment.

With this in mind, the researcher made the following assumptions:

- It is assumed that this learning theory fits clinical skills training;
- Experience plays a central role in the learning process;
- The learning cycle begins with a concrete experience that the student encounters (Jeggels, Traut & Kwast, 2010) and;
- The student observes all the aspects of the experience and reflects on them. This is followed by a conscious effort to gain insight and form a generalization (theory) about the experience (Abrahams-Marra, 2013).



1.9 Outline of the study

Chapter 1

The first chapter of this study provides the reader with the background of this study, its aim and the operational definitions used in the study. The chapter briefly explains the research methodology and ethical principle that was adapted to formulate the research. The theoretical framework of this study is based on the Experiential Learning theory and is also discussed.

Chapter 2

This chapter highlights the relevant literature review that was conducted to determine the root cause of nursing students' challenges in transferring skills learned in the skills laboratory to the clinical practice environment and analyses the nursing students experience in the clinical learning environment. It also examines the influence of the clinical learning environment on the integration of theory and practice and what constitutes effective learning. The chapter also

discusses the indicators that the South African Nursing Council and the university where this study conducted have put in place to bridge the gap between theory and practice.

Chapter 3

This chapter introduces the qualitative research methodology that was used in this study and explains the process that was adopted in collecting the data. It also describes the method that was used in analyzing the data and the steps that were followed.

Chapter 4

This chapter presents the analysis of this study including literature that corresponds to the achieved themes.

Chapter 5

This chapter presents the findings, the conclusion and the recommendations of this study.



UNIVERSITY *of the*
WESTERN CAPE

1.10 Summary

In chapter one the researcher provided an introduction and background to this study. This chapter describes the problem statement, aims and objectives of this study and includes research questions intended to be answered by this study. The significance of this study was also presented in this chapter. The following chapter discusses the literature reviewed relating to this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Chapter one discussed the research problem and the context of this study. This chapter discusses the literature review conducted for this study with regards to clinical supervisors' perceptions about the challenges students face when transferring skills from the skills laboratory to the clinical practice environment. A literature review helps researchers to understand the meaning and nature of the identified research problem (De Vos, Strydom, Sculzhe, & Patel, 2011). LoBiondo-Wood and Haber (2010) describe a literature review as systematically and critically appraising imperative literature on a topic. In addition, according to Burns, Grove, and Gray (2014) a literature review as an organized written presentation. This literature review presents the researcher's knowledge of the most recent existing data that has been published on this topic by other scholars. A review of literature was performed using the following electronic data basis: Cumulative Index to nursing and Allied Health Literature, Pubmed and Science Direct, Academic search elite, Stephens, Company (EBSCO HOST), Google Scholar, Elsevier and the on-going support and assistance of the supervisor.

2.2 Clinical supervision and student support

Supervision of nursing students in a clinical practice plays a vital role, as it impacts students' acquisition of knowledge, skills attributes and attitudes (Copenhaver 2018). Clinical supervision is defined by (Bruce et al., 2011) as the conscious and purposeful guidance and assistance of students, based on their exclusive needs. Student accompaniment is crucial, since the student

needs to be guided, supervised and assisted in gaining self-confidence and self-esteem through academic and emotional support by a clinical supervisor. A study by Salifu, Gross, Salifu, and Ninnoni, (2019) highlighted that lecturers should also provide clinical supervision in order to close the theory-practice gap, as it was observed that there is a discrepancy between classroom theory and learning that takes place in the clinical area. It is required of lecturers employed by the university in the Western Cape where this study was conducted to supervise at least six students per term to close the theory-practice gap. Lekhuleni et al. (2014), addressed the concern that clinical supervisors found that processes of patient care management, taught to students, were not instituted in the clinical learning environment.

Students gain theoretical knowledge during lectures after which the clinical supervisor assists them with clinical practice in the simulation laboratory. Students are then allocated to different facilities where they are supervised and receive support to in achieving their learning outcomes (Bruce, 2011). Clinical supervisors are employed by a Higher Education Institution (HEI) to assist students in the application of knowledge, skills and attitudes in real-life situations. Clinical supervisors also serve as supportive systems for students. Clinical supervisors provide support to students through their care, efforts, and assistance with challenges that students experience, ensuring students' success with the educational process (McEnroe-Petitte, 2011). Clinical supervisors are employed by nursing education institutions and are tasked to prepare, support and guide nursing students during clinical learning, whether simulated or in real-life clinical settings. It is expected that with the necessary support from clinical supervisors, lecturers and staff in the clinical setting, students should be able to transfer skills from the laboratory to the clinical practice environment.

The role and function of clinical supervisors is to ensure that students integrate skills acquired in the clinical learning environment. They are exclusively allocated a certain number of nursing students, as per students' academic timetables, and are responsible for the daily supervision of bed-side nursing and supporting the students in practical nursing skills (Fakude, LeRoux, Daniels, & Scheepers, 2014). Clinical supervisors' duties include: conducting lectures, demonstrations, facilitating guided practice, as well as assessing and evaluating the competence level of students' clinical skills (Jeggels et al., 2010).

A lack of supervision may lead to nursing students misunderstanding clinical procedures, thereby delaying their development of clinical competence which may cause them to lose interest in the nursing profession as they become frustrated in their work. Students also need to feel welcome in the facilities to which they are allocated for clinical learning, so that they may work and feel free to ask questions. More recently, Houghton, Casey, Shaw, and Murphy (2012), in their study on students' experiences of implementing clinical skills in the real-life situation, also found that students experienced inconsistency between what is taught and what is practiced and they advocated a need for principle focused teaching, whereby differences in performing procedures may be allowed as long as certain principles are adhered to. These findings are in line with those of Maginnis, Croxon, and Croxon (2010) in their study entitled "Transfer of learning to the nursing clinical practice setting" which revealed that even when students viewed themselves as sufficiently prepared in the clinical laboratory and well equipped for clinical practice, they still found some discrepancies in real practice which were due to the professional nurse's preferred ways of performing procedures (Maginnis et al., 2010).

This indicates that students are not prepared effectively for the work they will be required to perform after graduation.

In addition, anecdotal evidence indicates that students have expressed anxiety and concern about their perceived lack of preparation for practice. Students' experiences in a clinical practice environment may have an acute impact on their learning, whether positively or negatively. Some of these experiences include application of skills taught in practice, effective mentoring and constructive feedback.

2.3 The role of the South African Nursing Council in clinical nursing education

The government of South Africa, through the Nursing Act No. 50 of 1978 as amended in Act No. 33 of 2005, has delegated the responsibility to promote and maintain the standards in nursing education to the South African Nursing Council (SANC) (South African Nursing Council, 2005). The SANC acts as an Education and Training Quality Assurance (ETQA) body. This type of body is tasked with the responsibility for monitoring the process of nursing education. The nursing programme takes place at Higher Education Institutions (HEIs) which are assessed and accredited by SANC. The curriculum of the nursing programme such as the Bachelor of Nursing degree (BNur), comprises 50% theory and 50% practice (Nursing Education and Training Standards, SANC, 2005).

The education and training of nurses in South Africa is regulated by the SANC through the setting of minimum requirements for theory and practice and the registration of qualifications. According to the SANC (2006, section 11), nursing students have to register with the SANC after enrolment at a nursing education institution. The theoretical component of nursing is taught at universities and colleges, while the clinical training of nursing students is done in hospitals and clinics.

The SANC states that all nursing students shall, throughout their training programme, receive integrated education and training to achieve both theoretical and clinical outcomes. In South Africa, the SANC is a statutory body which regulates the training of nurses and is responsible for monitoring the quality of nursing education and training. The SANC is also responsible for the accreditation of nursing education institutions nursing programmes, and the clinical practice areas where students will be placed for such training (Nursing Act No. 33 of 2005, 2005:8).

Accreditation by the SANC (SANC Regulations, Government Notice No. R173, 2013:5) requires a nursing education institution to have a formal agreement with the relevant authorities for clinical practice environment areas as a training site. The training facility must provide learning opportunities, which will meet the needs of the student nurse placed in these clinical practice environments through clinical accompaniment and supervision (SANC Regulations No. R173, 2013:5).

Accreditation of a nursing education institution depends on a variety of factors. The institution should have a formal agreement with a clinical facility for the clinical practice of nursing students. The clinical facility should have control mechanisms over the quality of clinical education and training. The needs of the nursing student should be addressed by the clinical facility. The clinical resources and infrastructure should be sufficient for students to meet their clinical learning objectives (SANC 2013: section 58(1)). Despite the agreement the education and training institutions have with the clinical facilities, the clinical facilities are facing drastic changes due to management and economic transformation.

Undergraduate professional nurse training in South African can be obtained by completing a four year diploma in nursing that is based on Regulation 425 (R425) which is obtained in nursing

colleges. Prospective nurses can also complete a basic degree in nursing, namely a BNur degree, which is also based on R425, and is obtained at a university. Undergraduate nursing training has both a theoretical and practical component. Linking theory and practice are core elements of the four year undergraduate nursing programme (South African Qualifications Authority, 2010).

The SANC (2013: section 58(1)) defines a clinical practice environment as “a continuum of services to promote health and provide care to individuals and groups, and is used to teach students”. Education and training institutions have to ascertain if the clinical facilities where students will be allocated provide a suitable environment for learning before submitting a report to the SANC in the application for accreditation. Student nurses should perform practical procedures in real-life clinical environments (SANC 2013: section 58(1)).

2.4 Clinical practice environment and challenges experienced by nursing students

The SANC (2013: section 58(1)) defines the clinical practice environment as an environment where the health of the individual and groups is promoted and care is rendered including the training of student nurses. Bruce (2011) refers to the clinical practice environment as a “practical setting”, which means an environment where nursing students can safely learn and develop clinical nursing skills. According to SANC (2013: section 58(1)), the clinical practice environment is essential because no nursing education institution can be accredited by SANC without the accredited clinical learning environment. Teaching in the clinical practice environment can be formal or informal, where teachable moments are used (Bruce, 2011).

The clinical practice environment provides real-life situations and allows the student nurse to use cognitive, psycho-motor and affective skills, which are vital for development of the specific

knowledge, problem-solving skills and values required in the nursing profession (Kapucu & Bullet, 2011). Nursing students acquire skills, knowledge and clinical values in the clinical practice environment. They also correlate and transfer what they have learned in the skills laboratory and classroom to the clinical practice environment. The clinical practice environment is defined as an “interactive network of forces within the clinical setting which influence the students’ clinical learning outcomes” (Manap et al, 2019). Some authors believe that the clinical practice environment includes everything that surrounds the student nurse, including the clinical setting, the staff and the patient (Papp, Kaarkkanen, & Von Bonsdorff, 2010). This implies that the clinical learning of nursing students depends on a supportive learning environment which includes the nursing staff, clinical supervisors and other health team members who are involved in the students’ clinical learning. Students are involved as team members and encouraged to learn from the nursing staff in the clinical practice environment.

A conducive clinical practice environment is one that is supportive with a good ward atmosphere, good relationships and is perceived to generate positive learning outcomes (Dale, 2013). Results in this study indicated that the clinical practice environment was not conducive for clinical learning. There were concerns from clinical supervisors that nursing students had difficulty in transferring skills learned in the skills laboratory to the clinical practice environment due to insufficient and outdated equipment which hindered them in reaching their objectives, being included as part of the workforce, as well as an overcrowded learning environment. The clinical practice environment can influence the learning of nursing students positively or negatively (Arkan et al., 2018). The challenges that nursing students may encounter could have an impact on their learning and the transfer of knowledge learned in skills laboratory to the clinical practice environment. Studies have mentioned acute lack of resources, including

equipment and supplies in the clinical environment as compromising clinical learning (Evans, Razia, & Cook, 2013). A study by Baglin and Rugg (2010) in the North West province revealed that a shortage of clinical staff, limited equipment, high bed occupancy, financial constraints, limited resources and a lack of structure in the clinical practice environment can influence the ward atmosphere and the ability of student nurses to transfer skills learned into practice in the clinical practice environment. If students lack resources, they will be unable to practice the skills they have learned in the skills laboratory. In addition to a lack of equipment and learning opportunities, severe shortage of staff is often mentioned by clinical supervisors as negatively impacting students' learning and ability to transfer skills from the skills laboratory to the clinical practice environment. Aloush (2019), claims that students are not adequately supervised when there is a shortage of staff as students may be included as part of the work force and are thus unable to attain their clinical outcomes, which negatively impacts their clinical learning outcomes. In South Africa, Magobe, Beukes, and Muller (2010) found that nursing students were treated as staff members rather than students in the clinical practice environments due to a shortage of clinical nursing staff. Adequate resources, both material and human, are essential for optimal clinical learning to ensure the proper transfer of skills learned in the skills laboratory to the clinical practice environment.

A positive learning environment is where staff are happy, friendly, with good morale and attitude, cooperative and willing to help students and provide quality patient care (Papastavrou, Lambrinou, Tsangari, Saarikoski, & Leino-Kilpi, 2010). According to Papastavrou et al. (2010), students acquire confidence and objective learning skills when they are respected and recognized as part of the team, whereas behaviours such as staff being unfriendly, displaying bad attitudes and denying students opportunities to learn, are obstacles to learning. In a study by L'Ecuyer

(2019) it was stated that nursing students encounter problems in the clinical learning environment where there is little support by ward staff due to staff shortages and busy schedules. They often do not have time for slow learners with the result that these students end up doing procedures incorrectly and have difficulty transferring skills learned in the skills laboratory to the clinical learning environment.

The clinical supervisors from this study also raised a concern that students come from different educational backgrounds and some students required additional time in the skills laboratory. Some nursing staff do not have enough time for students due to staff shortages. Draper (2009) states that support from clinical supervisors and senior nurses during students' accompaniment helps prepare students with the necessary knowledge, skills and confidence for independent practice as professional nurses.

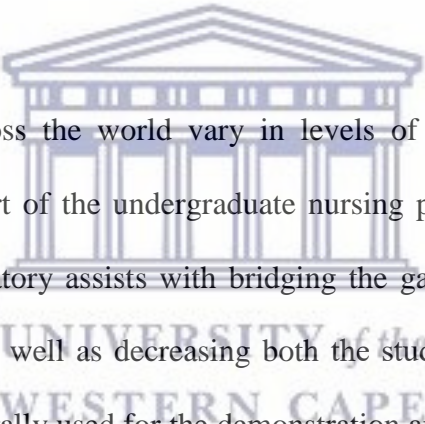


2.5 Clinical skills laboratories

Nursing skills laboratories evolved over the past decades in response to the practical learning needs of undergraduate student nurses. Skills laboratories are also known as clinical skills rooms, simulation laboratories and learning resource centers with varying levels of technologies (Abrahams-Marra, 2013).

The benefit of simulation in nursing education is the ability to teach clinical skills in a non-threatening, safe environment where mistakes can be made without harm to a patient. According to Jeggels et al. (2010), most educational institutions that provide health related qualifications make use of clinical skills laboratories. The skills laboratory is a safe environment where students are able to practice procedures and gain competence in order to perform a procedure on

a real patient (Traut, 2013). Indications are that there is a tendency to design the clinical skills laboratories as an acute hospital care setting with little or no design incorporated to include other forms of nursing or patient care (Bruce & Johnson, 2019). Simulation teaching originated as basic life support (resuscitation) programmes developed by Laerdal, a medical equipment company in Norway (Abrahams-Marra, 2013). The focus of the company had been was to enhance patient safety during acute hospital care. Simulation equipment was developed for anesthesia to allow for training in endotracheal intubation (Bland, Topping, & Wood, 2011), and moved into many other areas of the health profession, including nursing, with the initial introduction of 'Resus Annie' and more recently, Sim Man, a lifelike computerized mannequin (Abrahams-Marra, 2013).



Clinical skills laboratories across the world vary in levels of technology and usefulness in developing nursing skills as part of the undergraduate nursing programmes (Abrahams-Marra, 2013). The clinical skills laboratory assists with bridging the gap between the class room and clinical practice environment as well as decreasing both the students' and clinical supervisors' anxiety. These settings are generally used for the demonstration and assessment of clinical skills. A well-equipped laboratory includes mannequins, audio-visual aids and computer-aided instruction. The clinical laboratory affords students the opportunity to practice clinical skills on mannequins and simulated patients (Donough, 2014). Students should be able to practice the skills until they are competent and confident before utilizing these skills in the clinical practice environment with real patients (Crafford, Kilian, & Moore-Saayman, 2019). The clinical skills laboratory is also used to encourage self-directed learning, improve communication skills and motivate students' learning (Donough, 2014). Maginnis et al. (2010) believe that clinical

supervisors should utilize clinical laboratories that are equipped with technology such as mannequins and video/DVD to bridge the theory-practice gap.

2.6 Conflicting practices in nursing education

Conflicting practices have been described as the disparity between what has been learned in the classroom setting and what is practiced in the clinical practice environment and is found to play a significant role in the challenges in transferring skills learned to the clinical practice environment.

Corlett, Palfreyman, Staines, and Marr (2010) describe conflicting practice as the discrepancies found between what nursing students learn in the formal classroom setting, and what they experience in the clinical practice environment for detailed experiential learning. The nursing education institution is responsible for ensuring that the nursing student can link skills taught in the clinical practice environment to their learning outcomes as indicated in their programme (Bruce, 2011). Theory and practice should be congruent when teaching student nurses (SANC, 2013). Conflicting practices between ideal nursing standards taught in the education institute and those practiced in the clinical practice environment result in students being confused, stressed and anxious, thereby having a negative impact on learning (Hunter & Cook, 2018). From the studies reviewed, it is evident that the problem of the theory-practice gap persists, despite the research that has been conducted. Adequate learning takes place when nursing students apply what they have learned in the classroom situation and practiced in the skills laboratory to the reality of nursing, which is in the clinical practice environment.

Research conducted by Albloushi, Alghamdi, Alzahrani, Aldawsari, and Alyousef, (2019) in Iran and Safadi, Saleh, Amre, and Froelicher (2012) in Jordan, showed that students reported incongruences between what was learned in the class and skills laboratory, and the actual practice in the clinical practice environments.

According to a study by Senti and Seiko (2014), the procedure manual which guides students on how to perform skills in the clinical practice environment was outdated and different from the one in the clinical practice environment thus causing confusion among students. This concurs with the study done in Iran by Raifee, Moattari, Nikbakht, Kojuri, and Mousavinasab (2014) who revealed that clinical assessment tools were not reliable because they did not measure students' achievements and progress. Similarly, the study done by Bray (2014) reported that students experienced challenges when applying clinical skills in practice because the examination technique taught by the clinical supervisor was different to what was done in the clinical - practice environment. Furthermore, the study done by Dlamini (2011) in the KwaZulu-Natal province reported that the main problem that caused students to experience difficulties in transferring learned skills into real-life practice was the poor communication between the Nursing Education Institutions and clinical practice environments. The study done by Dale (2013) in Norway indicated that nursing students were being included in challenging and stressful situations without considering their level of training.

Similarly, a study by Henderson, Cooke, Creedy, and Walker (2012) in Australia revealed that the ideas and values set by the Higher Education Institutions (HEIs) were professional and included a patient-centered approach, but when nursing students progressed to their clinical learning, they discovered that they had to conform to the ways that the clinical nursing staff in the wards practiced, which were task and procedure-orientated. Chan (2013) indicated that these

nursing students experienced vulnerability and a sense of isolation, which left them feeling marginalized and they experienced difficulty in transferring the skills they had learned in the skills laboratory to the clinical practice environment.

Literature revealed that conflicting practices exist, which is a source of concern and affects students learning. Studies suggest that the use of pedagogical approaches such as guided reflection and Problem Based Learning (PBL) can close the gap between skills acquired and those which are practiced (Dlamini, 2011). PBL and reflective processes which focus on both cognitive and affective aspects allow nursing students to learn from their practical experience through discussions and meetings with other students under the guidance of the clinical supervisor. This enables students to become independent self-learners, thereby developing critical thinking and problem solving skills (Phillips, Mathew, Aktan, & Catano, 2017).

2.7 Learning resources in the clinical practice environment

The accredited clinical practice environments should have adequate clinical resources for students to achieve their clinical learning outcome as reflected in their programme (SANC, 2013). According to the study done in Iran by D'Souza, Venkatesaperumal, Radhakrishnan, and Balachandran (2013), when nursing students are supported by the multidimensional resources at the clinical practice environment, their involvement is adequate. These resources include human resources, clinical equipment and supplies.

Demonstration of the skills by the clinical supervisors at the clinical practice environment was affected negatively by use of outdated equipment and shortages of supplies. This concurs with the study done in Cameroon by Eta, Atanga, Alatshili, and D'Cruz (2011), who reported that

shortages of working and teaching material at the clinical practice environment negatively affected clinical teaching of nursing students. Similarly, the study carried out by Naranjee (2012) reported that nursing students failed to perform procedures according to the way they had been taught because of shortages of equipment and supplies at the clinical practice environment. In New Zealand, Sinclair (2013) found that clinical practice environments were “unsafe” and health care was at risk due to lack of clinical resources. Kagafela (2013) reported that due to a shortage of equipment in the clinical practice environment, some students made use of their own equipment in order to ensure proper patient care.

These discussions show that the availability of clinical resources is highly important because if there is a shortage, students will experience difficulties in transferring skills they have learned in the skills laboratory to the clinical practice environment. This would result in demonstrations of clinical skills and clinical learning objectives of nursing students being negatively affected, leading to the clinical practice environment being exposed to health hazards.



2.8 Tasks involvement, participation and opportunities for students in the clinical practice environment

According to Henderson et al. (2012), task participation can be referred to as students being offered opportunities to learn and involved in providing holistic patient care and not merely performing a list of tasks. Studies have revealed that task participation and accomplishment expedite learning and lead to the development of clinical skills and confidence (Henderson et al., 2012). Participation in a task enables students to reflect on experiences in terms of how the task was performed, the outcome, whether successful or not, and how to execute the experienced

practice in a new situation. This leads to students becoming critical thinkers and proficient in making clinical judgments. In addition, students acquire clinical learning opportunities to gain concrete experiences which they can later reflect on (Morley, 2018). According to Chuan and Barnett (2012), the acquisition of knowledge and experience which allows nurses to become competent is dependent on the availability of opportunities to learn in the clinical practice environment. However, a lack of these opportunities, means students may not learn how to approach challenging tasks in the future and will not be able to transfer the skills they have learned in the skills laboratory to the clinical practice environment. Similar findings were reported by Hickey (2010), where learning was focused on non-nursing tasks and lacked challenging opportunities to practice ideal nursing procedures. Students doing non-nursing as well as basic tasks have also been reported in other studies (Chuan & Barnett, 2012). Preparation of students in the classroom helps them to understand what is expected in the clinical practice environment (Gokalp, 2013). Students who are poorly prepared for clinical practice are more likely to become stressed and demotivated to learn (Morley, 2018). Additionally, a heavy workload in the wards turns the focus towards finishing the tasks, denying students the opportunity to learn (Chuan & Barnett, 2012).

Registered nurses should create opportunities for students to practice critical thinking and clinical judgement and to achieve their learning objectives (Lekhuleni et al., 2014). Providing students with opportunities to care for patients in a supportive, safe, non-life threatening environment, under direct supervision and feedback, will lead to effective learning, as they visualize being a nurse (Scully, 2011). In addition, students require clinical learning opportunities to gain concrete experience which they can later reflect on (Morley, 2018).

2.9 Summary

In this study, the literature review covered national and international studies. The current literature review revealed that most nursing students experienced difficulty in the transfer of skills learned to the clinical practice environment. The focus of this literature review was based on areas relevant to this study's objectives, namely challenges facing nursing students in the transference of skills they have learned in the skills laboratory to the clinical practice environment.



UNIVERSITY *of the*
WESTERN CAPE

CHAPTER THREE

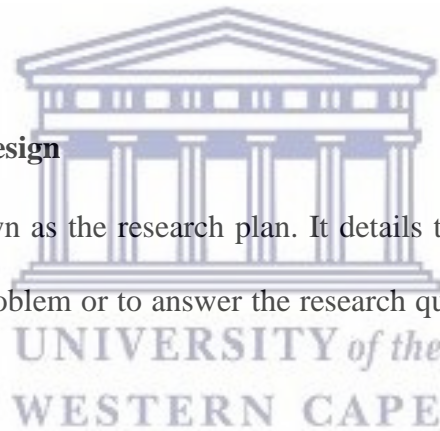
RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on the ways in which the researcher approached the study and the various aspects relating to the research methods of the empirical study. In this chapter, the research design, setting, population used, sampling and method used for data collection and data analysis are discussed, as well as the measures to ensure ethics compliance and trustworthiness of the study.

3.2 Research approach and design

Research methodology is known as the research plan. It details the methods that the researcher used to explore the research problem or to answer the research question (Burns, Grove, & Gray, 2014).



3.3 Research approach

A qualitative research approach was used for this study. According to Brink (2012), qualitative research is a method of enquiry which focuses on the in-depth aspects of the meaning, experiences and opinions of the selected participants with the aim of understanding a phenomenon from their perspective. This allows for descriptions of the findings. Qualitative research is effective for studying human perception as it allows the researcher to gather the data in the form of words instead of numbers; its focus is on the qualities and meanings of the

phenomenon as expressed by the participants (Jolley, 2013). It also allows for discussion between the researcher and the participants and as a result, the researcher can investigate deeper meanings as experienced by the participants. Participants were approached in their familiar environment at the nursing education institution and open-ended questioning allowed the participants to express their views freely, thus ensuring the phenomenon unfolded naturally without any manipulation. In this study, the clinical supervisors' perception regarding nursing students' transference of skills from the skills laboratory to the clinical practice environment was investigated. The qualitative research allowed the researcher to investigate this phenomenon from the views of the clinical supervisors' and the data were expressed in words.

3.4 Research design

The purpose of a research design is to provide a plan for answering the research questions (Van Graan & Williams, 2017). The study thus used an exploratory, descriptive design as this provided the researcher with a deeper and more detailed understanding of the research topic as well as ensuring objectivity.

3.4.1 Exploratory research

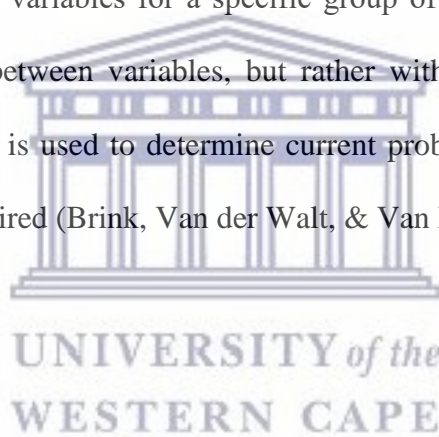
An exploratory design is undertaken when little is known about the phenomenon under study and acts as a foundational study (Botma, Greef, Mulaudzi, & Wright, 2010). Polit and Beck (2012) state that the research design of a study provides the basic strategies that researchers adopt to develop evidence that is accurate and interpretable.

According to Polit and Beck (2012), a study begins by exploring the full nature of a phenomenon, the manner in which it is manifested, and other factors to which it is related,

including potential factors that might be causing it. In this study, the researcher explored and gained a deeper understanding of the perceptions of clinical supervisors regarding nursing students' skills transfer from the skills laboratory to the practice environment thus enabling the generation of new ideas and knowledge.

3.4.2 Descriptive research

Descriptive Research was used to accurately describe the perceptions of clinical supervisors with regard to nursing students' skills transfer from the skills laboratory to the practice environment. Doody (2014), states that a descriptive research design is intended to answer questions about the current state of an individual's variables for a specific group of individuals. The design is not concerned with relationships between variables, but rather with the description of individual variables. A descriptive design is used to determine current problems in a practice and is used where more information is required (Brink, Van der Walt, & Van Rensburg, 2012).



3.5 Research setting

Burns and Grove (2012), define research settings as the location where the study is conducted.

This study was conducted at a School of Nursing at a university in the Western Cape where the clinical supervisors are employed. The School of Nursing is part of the Faculty of Community and Health Sciences and is the largest residential nursing school in South Africa. It is accredited by the South African Quality Authority (SAQA) and all the programmes offered in the school are registered with the SANC. Clinical supervisors are assigned to each of the four year-level groups and clinical learning activities are coordinated by a clinical coordinator assigned to each year-level. The core programme is the undergraduate Bachelor Nursing degree programme in

which a large number of students are enrolled, as well as a two-year extended curriculum programme, also known as the Foundation programme in which approximately 50 students are enrolled per annum. The School of Nursing opened in 1972 with 14 students, and currently more than 1000 students are registered over the entire programme. Approximately 33 clinical supervisors are appointed by the School of Nursing and are respectively assigned to supervise students at all year levels. See Table 3.1.

Table 3.1: Assignment of clinical supervisors to the various years of study

Year of study	Total number of students per year of study	Total number of clinical supervisors per year level
Extended Curriculum (Foundation 1)	59	4 (Combined)
Extended Curriculum (Foundation 2)	57	
First Year	266	14 (Combined)
Second Year	313	
Third Year – Community Health	126	5
Third Year Midwifery	111	5
Fourth Year Psychiatry	195	5
Total	1127	33

3.6 Research population

Burns, Grove, and Gray (2014), define population as all elements, individuals, objects or substances that meet the criteria for a study. A population may be either broadly defined when thousands of individuals are involved, or narrowly specified when the population includes a small number of people. The accessible or source population is the aggregate of cases that conform to designated criteria and that are accessible as participants for a study. Researchers usually sample from an accessible population (Polit and Beck, 2012). In this study, the accessible population consisted of 12 clinical supervisors employed by the School of Nursing. There was one male and 11 female clinical supervisors.

3.7 Sampling technique and sample size

Purposive sampling was chosen for this study to allow participation of supervisors who were identified as having experience of the topic under study. A sample represents a part of a whole or a subset of a larger set (Brink et al., 2012). Participants were deliberately selected based on their knowledge of the topic (Burns & Grove, 2012).

Purposive sampling with maximum diversity over all levels of the foundation and mainstream Bachelor of Nursing programmes was used. Purposive sampling is a non-probability sampling method, whereby participants are selected because they are likely to generate useful data for the study (Burns & Grove, 2012). The researcher selected clinical supervisors who could purposefully inform the study based on their understanding of the research problem and central phenomenon in the study (Creswell, 2013). The researcher began by interviewing two clinical supervisors from each year level of the foundation and mainstream programmes with the sample size estimated at 12 supervisors; data collection would end when data saturation was reached.

According to Polit and Beck (2010) data saturation is the collection of data in a qualitative study to the point where a sense of closure is attained because any new data yields redundant information. As the researcher was conducting the last interview there was repetition of existing findings, with very little new emerging data, indicating data saturation.

3.7.1 Inclusion criteria

All clinical supervisors supervising Foundation year 1 and 2 and the 1st, 2nd, 3rd and 4th year of the mainstream Bachelor of Nursing programme.

3.8 Data collection method

Semi-structured interviews were used in this study to obtain data from the participants as they are useful for addressing research aims and objectives that are based on perception, views and experiences. Clinical supervisors in this study were invited for individual semi-structured interviews on a given date and at a time that all parties could agree to. This type of interview allowed the participants to express their opinions and feelings on the phenomenon without the restrictions of closed ended questions or the interviewer's opinions (Burns & Grove, 2012).

3.8.1 Data collection instrument

A semi-structured interview guide was used (Appendix 1). The questions in the semi-structured interview guide were self-developed for the purpose of the study. The semi-structured interview guide ensured that the interviewer maintained a reference to the aims and objectives of the study. The questions consisted of a limited number of open-ended key questions. The pre-determined, open-ended, probing questions were used as a guide to engage the participant in a discussion based on the objectives of the study (De Vos et al., 2011).

3.8.2 Probing

Probing was achieved by asking the participants neutral questions such as “Tell me more”, “Please elaborate” (Holloway & Wheeler, 2013). Edward and Holland (2013) describe probing as a verbal or non-verbal prompt that is made by the researcher when participants need to provide a more detailed answer. Probing can also be useful to bring participants back on track, if they begin to wander off the question posed by the researcher.

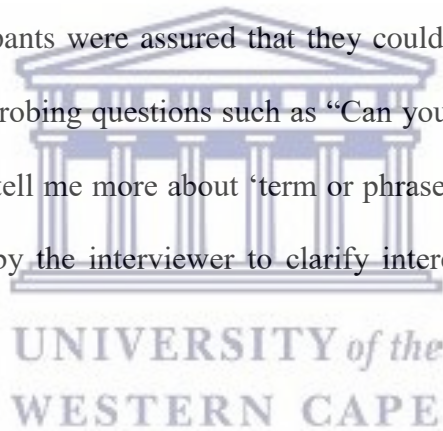
3.8.3 Pilot interview

Two pilot interviews were conducted by the researcher in order to evaluate and test the semi-structured interview, guide methodology, appropriateness and interview time. According to Brink (2012), the purpose of a pilot interview is to test the accuracy of the instrument; to establish whether the participant would understand the open-ended questions posed to them and to identify possible vagueness of a question. Pre-determined, open ended probing questions were used as a guide to engage the participants in a discussion on the objectives of the study (De Vos et al., 2011). The questions in the semi-structured interview guide were clear and understandable in order to meet the aims and objectives of the study. Two pilot interviews were conducted and shared with the researcher’s supervisor, who listened to the interviews and scheduled a meeting with the researcher in order to provide feedback on the results of the pilot interviews. This pilot interviews were included in the main study (De Vos et al., 2011).

No changes were made to the questions on the semi-structured guide after conducting the pilot interview.

3.8.4 Data collection process

Permission to interview the clinical supervisors was sought from the Director of the School of Nursing. The coordinator of the clinical supervisors was consulted to arrange access to the clinical supervisors. The coordinator requested confirmation of an appropriate date and time to meet the clinical supervisors. Interviews took place at the School of Nursing, and on the agreed date, the clinical supervisors were informed about the study and any questions were answered. Printed copies of the information sheets pertaining to the research study were distributed to the selected clinical supervisors (Appendix 2). On the day of their interview, the individual clinical supervisors were asked to give written consent to be interviewed and for the use of an audio recorder (Appendix 3). Participants were assured that they could seek clarification should they not understand the questions. Probing questions such as “Can you tell me a little bit more about this ‘term or phrase’”, “please tell me more about ‘term or phrase’”, and “please elaborate more ‘term or phrase’”, were used by the interviewer to clarify interesting statements and relevant issues raised by the participant.



3.9 Data Analysis

In qualitative study, there are overlapping periods of data collection and data analysis as the researcher is the tool for data collection and data is analysed as it is received (Botma, Greef, Mulaudzi, & Wright, 2010).

Polit and Beck (2012) state that the purpose of the data analysis is to organise, provide structure to, and elicit meaning from research data. De Vos (2011) cites Patton as stating that qualitative analysis transforms data into findings. The process involves reducing the volume of raw data, sifting important information from the relevant data, identifying important patterns, and

constructing a framework for communicating the essence of what the data reveals (Abrahams-Marra, 2013).

The semi-structured interviews were recorded and transcribed verbatim to enhance the trustworthiness of the data collected (Example Appendix 6). As a result, the researcher obtained evidence through observing the phenomena and made conclusions based upon the evidence.

The method of data analysis for this study is discussed and the findings presented in detail in chapter four. Creswell's method of data analysis (Creswell, 2013) was implemented.

3.9.1 Organisation and preparation of data

All interviews were transcribed word for word and two recorders were used to ensure audibility for the transcription. Numbers were allocated to participants to identify and protect their identity and for direct quotation to enhance the credibility of the discussion and findings. Field notes were read while listening to the recordings to ensure consistency of the data. The researcher made additional summaries of ideas which arose during the interviews.

3.9.2 Developing an overview of the research

Re-reading of data was done across all interviews, to develop an overview of the research and the researcher was able to reflect on its meaning. Any underlying meanings were written in the margin. When transcribing was completed, hard copies of data were printed.

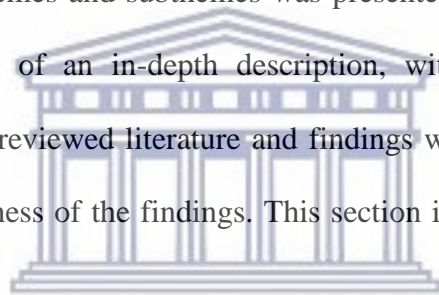
3.9.3 Coding of the data

The research questions were reviewed and the participants' perceptions of factors that promote, inhibit, and challenge the transfer of skills from the skills laboratory to the clinical learning environment were noted and highlighted across all interviews. Perceptions that occurred

frequently in each interview were noted and underlined, forming text segments. A phrase was assigned that best described the text segments, forming codes. The researcher used the most descriptive wording to provide a topic for all similar codes to form themes. The related codes were grouped together and subthemes were identified in each theme where appropriate. These themes were then analysed. Multiple perceptions from different participants were identified and described using the participants' quotations to describe and explain the phenomenon in more detail, as well as to increase the trustworthiness of the data.

3.9.4 Presenting the findings

A summary of the findings, themes and subthemes was presented in table form. Findings were further presented in the form of an in-depth description, with direct quotations from the participants. An integration of reviewed literature and findings was done to extend and explain the themes and add to the richness of the findings. This section is described in depth in chapter four.



UNIVERSITY of the
WESTERN CAPE

3.9.5 Interpretation of the findings

According to Creswell (2013), the interpretation stage involves making sense of the data through reflection, including the researcher's personal views and comparing new findings with past studies. The overall results of the findings are discussed in detail in chapter four.

3.10 Rigor for qualitative data

Rebar, Gersch, Macnee, and McCabe (2010) describe rigor as the "overall quality of data collection, analysis, interpretation, trustworthiness of the data, transferability of the themes and credibility". The aim of rigor is to ensure that the study findings are a true representation of the

participants' experiences (Holloway & Wheeler, 2013). In this study, the following were observed in order to ensure rigor.

3.10.1 Trustworthiness

Trustworthiness is a way of evaluating the quality, validity and rigor in qualitative research. The data collected for this descriptive qualitative study was evaluated for trustworthiness. Researchers make judgments of trustworthiness possible through developing dependability, credibility, transferability and conformability, reflexivity. The objectivity of the researcher is important; therefore, the values, feelings and perceptions of the researcher did not play a role in the research (Doody, 2014).

3.10.2 Dependability

According to Polit and Beck (2012) dependability refers to the consistency and stability of data collected. In this study, data was collected from the clinical supervisors who were directly involved in the clinical training of students and who were working at the university where this study was conducted. The researcher achieved dependability by maintaining credibility of the results. The report was given to randomly selected participants so that they could recognize their own experiences (Holloway & Wheeler, 2013).

3.10.3 Credibility

Credibility means that the researcher's findings have to reflect the participants' ideas and meanings of their experiences which are not distorted but the truth has been reported (Holloway & Wheeler, 2013). Jolley (2013) describes credibility as the "degree to which the researcher's interpretation of the data can be justified in data itself".

In this study, the credibility was ensured by showing a summary of the findings to some participants to confirm whether it was a true reflection of their perceptions and experiences.

Field notes were written during the interviews to ensure credibility of data. Information was probed during interviews until data saturated was reached. A detailed summary of the interview was written immediately after each interview to clarify the data obtained from participants and confirmation of the data. Voice recordings were also used to assist the researcher to review data. To establish confidence in truth of the findings, voice recordings were played repeatedly during report writing to ensure that all information was transcribed correctly. The researcher kept a journal as a tool for an audit trail to ensure credibility (Bruce, Grove, & Gray, 2014). It was ensured that the information collected was meaningful and credible so that the users of the findings from this study could make valid decisions on the applicability of the results in other similar settings (Holloway & Wheeler, 2013).

Credibility was further ensured by taking the measures mentioned below into consideration.

Member checking:

Member checking refers to the sharing of findings with the participants to verify accuracy (Creswell, 2013).

- Informal member checking was done during the interviews through clarification with the participants. This was achieved by the researcher through summarising and re-stating the participant's comments during the interview.
- Findings were confirmed with the participant after the final coding of themes to verify the truth of the findings.

3.10.4 Transferability

Transferability refers to the extent to which the findings could be applied in another context or with other respondents (Babbie & Mouton, 2014). This was ensured by the presentation of a detailed description of the participants, research context and setting, together with appropriate quotations.

3.10.5 Authority of the researcher

The researcher plays a major instrument part in the data collection and analysis process.

- The researcher has over seven years of experience in nursing education, during which time she has assumed the role of a nurse educator/clinical supervisor to novice nurses and undergraduate nursing students who study at the university where the researcher is employed. This has enhanced the researchers' experience in clinical supervision.
- The researcher studied research methodology as part of her undergraduate studies and has a full understanding of the research process and procedures.
- The researcher's supervisors are highly experienced in supervision of post-graduate students and were closely involved in the data collection and analysis of this study.

Frequent debriefing sessions between the researcher and the supervisor

- The researcher maintained continuous communication through meetings and discussions with her research supervisor, who verified all stages of the study.

Ensuring the honesty of participants

- Participants were invited to voluntarily participate in this study.
- The right to withdraw at any stage with no resulting adverse consequences was explained.

- Participants were reassured that participating in the study or not will not affect their professional career.

3.10.6 Confirmability

Polit and Beck (2012) state that confirmability is the degree to which a study's results are derived from characteristics of participants and the study context, not from the researchers' biases. Qualitative research focuses on the characteristics of the data gathered in the study and by using an audit trail. Creswell (2013) calls it member checking to determine qualitative findings by sharing the final reports or themes with the participants to confirm their accuracy. In this study, bias was eliminated by the researcher with the use of direct quotes from the raw data, thus ensuring objectivity. Voice recordings made during the interviews were transcribed. An independent coder, the supervisor of the researcher, confirmed the interpretation of the data themes and responses identified by the researcher, thus ensuring that there were no discrepancies identified in the data analyses. Confirmability relates to whether the findings, conclusions and recommendations are supported by the data (the transcripts and field notes) and not by the biases of the researcher (Brink et al., 2012). The procedure was thoroughly documented for the checking and rechecking of data. The field notes, memos and transcripts were available upon request, as well as the reflective report, which allows the reader to follow the process of the research study.

3.10.7 Reflexivity

Reflexivity is the process of self-reflection by the researcher to provide more effective and impartial analysis (Holloway & Wheeler, 2013). This is the concept of reflexivity, in which the researcher is conscious of the bias, values and experiences that he/she brings to qualitative research study (Creswell, 2013). It is important for qualitative researchers to realise the

importance of positioning themselves in their writing. In this study, the researcher had several years of experience as a clinical supervisor at the School of Nursing where the study was conducted. The researcher maintained an awareness of reflexivity throughout the entire research process to reduce the risk of being misled by her own experiences and interpretations. The researcher made use of clarifying questions when the participants mentioned information they assumed the researcher should know. This was done in order to emphasize the researcher's role as an active learner, rather than an expert. The researcher also took into consideration that all the participants were known to her and therefore maintained a professional relationship with them.

3.11 Ethics

It is the responsibility of the researcher to ensure that the research is conducted in an ethical manner (Brink et al., 2012). Protection of human rights is an important consideration when planning research and in South Africa, ethical issues relating to a proposed research are evaluated by an accredited research ethics committee, which is also responsible for granting permission to proceed with a study (Brink et al., 2012).

The rights and protection of the participants were adhered to as follows:

3.11.1 Permission- Ethics approval was obtained from the university where the study was conducted (Appendix 4 - Ref No. HS17/10/21). Permission for the clinical supervisors to participate in the study was obtained from the Director of the School of Nursing at the university and the Postgraduate Research Committee.

3.11.2 Confidentiality- This refers to the researcher's responsibility to protect the gathered information from being disclosed to any other person (Brink et al., 2012), except the supervisor of the study. Participants were assured that the information they shared would be held in confidence.

3.11.3 Anonymity- The researcher ensured that all identifiable information was removed from the interview transcripts. To ensure anonymity pseudonyms should be used (Patton, 2011). Anonymity was ensured by keeping the recordings and the transcriptions of the recordings nameless. In addition, the researcher ensured privacy in all personal identification of the participants that arose during the interview. Personal identifications were easy to maintain during the interviews as interviews were semi-structured. Pseudonyms such as participant 1, 2, 3, etc. were used during the data analysis process.

3.11.4 Informed Consent- Adequate information about the research topic was shared with the participants in order for them to understand the purpose of the study, and have the ability to consent to participate or decline participation voluntarily (Polit & Beck, 2012). According to Burns and Grove (2012), informed consent is a written document which contains all information related to the purpose of the study, data collection and participants role in the study, and ensures that the participants have understood this information and are capable of making informed decisions and voluntary consent to participate in the study. Voluntary participation means that the participants are not in any way coerced or influenced to participate in the study (Burns & Grove, 2012). Prior to the study, participants were given an information sheet explaining the purpose of the study, the process of data collection and their role as participants in the study to enable them to make an informed decision. The participants were informed in writing that participation was entirely voluntary and that they could decline to participate. If they chose to

participate, they had the right to withdraw from the study at any time without affecting their studies. They would also not be penalised/prejudiced in any way by the researcher or the institution. The participants voluntarily consented to participate in the study through a written informed consent.

3.11.5 Privacy- This refers to the participant's right to determine the time, extent, and general circumstances under which his/her information is shared with or withheld from other people (Brink et al., 2012). The participants were assured that the information would only be available to the researcher and her supervisor. Any conversation between the researcher and the participant would remain confidential.

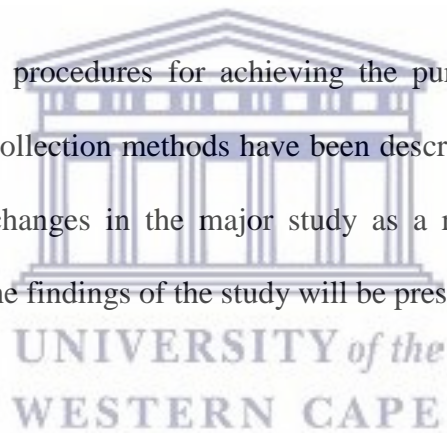
3.11.6 Non-maleficence- This refers to the participant's right to protection from any discomfort and harm (Burns & Grove, 2012). Participants were informed that the decision to either participate or not would not affect their studies. Participants were assured that there would be no harm in participating in this study and they would be allowed to withdraw at any time during the data collection period, without being penalised.

3.11.7 Justice- In research, justice refers to the right to fair selection and treatment of participants. Justice is defined by Polit and Beck (2012), as treating participants fairly and ensuring privacy. In this study, justice was ensured by approaching clinical supervisors who are involved in the undergraduate programme at this specific university and have experience in clinical supervision in the clinical learning environment as well as the skills lab environment. Participants ought to be selected based on the criteria enhancing the achievement of the researcher's personal preferences and all participants must have similar treatment (Burns & Grove, 2012).

3.11.8 Respect for person- A letter was given to all participants explaining the purpose of the study, risks and discomfort. The letter also explained the importance of confidentiality where anonymity was ensured by not using or mentioning names during the interview process. After participants were informed about the study, they were asked to sign a consent form. Self-determination was ensured as the clinical supervisors acknowledged their voluntary participation in the study without coercion. Participants could withdraw at any stage should they wish to (Brink, 2012). Participants were treated with respect during all stages of data collection.

3.12 Summary

In chapter three, methods and procedures for achieving the purpose of the study have been presented. Sampling and data collection methods have been described. The research setting was presented and no significant changes in the major study as a result of the pilot study were described. In the next chapter the findings of the study will be presented.



CHAPTER FOUR

FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings of the semi-structured interviews conducted with 12 clinical supervisors together with the field notes that were taken during interviews, which add richness to the findings. Interviews were analysed and coded by the researcher and the coded data were analysed and organised into themes and categories. The data generated three themes and fifteen categories. Quotes from the participants are cited in the chapter to give meaning to the categories and to enhance the credibility of the findings. The themes with relevant categories are presented in detail in this chapter.

The findings are also discussed in the context of existing literature about the phenomena. The results address the main objectives of the study which were:

- To explore the perceptions of clinical supervisors regarding nursing students' skills transfer from the skills laboratory to the clinical practice environment.
- To explore clinical supervisors' perceptions about the challenges with students' skills transfer from the skills laboratory to the clinical practice environment.

4.2 Demographic

All the participants provided their demographic details to the researcher during the interviews and this information is presented in the table below.

Table 4.1 Demographic information of participants

Participants	Gender	Year Level Supervised
Participant 1	Male	Foundation 1
Participant 2	Female	Foundation 1
Participant 3	Female	Foundation 2
Participant 4	Female	Foundation 2
Participant 5	Female	First year
Participant 6	Female	First year
Participant 7	Female	Second year
Participant 8	Female	Second year
Participant 9	Female	Third year (Midwifery)
Participant 10	Female	Third year (Community Health)
Participant 11	Female	Fourth year (Psychiatry)
Participant 12	Female	Fourth year (Psychiatry)

Participants comprised of one male and 11 female nursing supervisors. The data collected from two participants during the pilot interviews were also included in the study. Most of the participants have obtained a post-basic diploma in education and are well-equipped with nursing skills. Clinical supervisors were employed over the different year levels and supervise nursing students at different hospitals in the Western Cape.

Table 4.2: Themes and categories from semi-structured interviews with clinical supervisors

Theoretical Framework: Kolb's experiential learning cycle	Theme	Category
The availability of: 1. Concrete experience 2. Reflective observation 3. Abstract conceptualisation 4. Active experimentation	1. Factors that promoted skills transfer were related to the clinical education process and student learning	1.1 Demonstrations in skills laboratory environment were viewed as important
		1.2 The use of teaching aids to integrate theory into practice in skills laboratory
		1.3 Self-directed learning in skills laboratory is essential to monitor students' learning process
		1.4 Guided practice in the skills laboratory was perceived as important for the improvement of motor skills
		1.5 Students experienced learning in small groups in the skills laboratory to be effective and hands on
		1.6 Nurses' Grand Round regarded as useful for discussion of patient diagnosis, nursing care and management

<p>Challenges with:</p> <ol style="list-style-type: none"> 1. Concrete experience 2. Reflective observation 3. Active experimentation 	<p>2. Factors in the clinical learning environment that inhibited the transfer of skills from the skills laboratory to the clinical environment</p>	<p>2.1 Practices in the skills laboratory and clinical learning environment viewed as conflicting</p> <p>2.2 Limited clinical learning opportunities to practise nursing skills</p> <p>2.3 A language barrier exists among students and clinical staff</p> <p>2.4 Negative attitude of nursing staff in the clinical learning environment</p> <p>2.5 Students are used as part of the workforce in the clinical practice environment</p> <p>2.6 Clinical learning environment is overcrowded with students competing for learning opportunities</p> <p>2.7 High rate of student absenteeism from the clinical environment</p>
<p>Challenges with:</p> <ol style="list-style-type: none"> 1. Concrete experience 2. Active experimentation 	<p>3. Challenges related to the skills laboratory that inhibited the transfer of skills from the skills laboratory to the clinical learning environment</p>	<p>3.1 Skills laboratory is overcrowded</p> <p>3.2 Demonstration equipment in the skills lab is out-dated</p>

4.3 Presentation and discussion of themes and categories

Three main themes emerged from the interviews and fifteen categories emerged from these themes.

4.3.1 Theme 1: Factors that promoted skills transfer were related to the clinical education process and student learning

This theme generated six categories. The theme centres around the importance of the promotion of skills learned in the skills laboratory as well as the transferring of these skills to the clinical practice environment. The focus of this theme includes the importance of the use of the skills laboratory methodology.

4.3.1.1 Category 1: Demonstration in the skills laboratory

Demonstrations in the skills laboratory environment were viewed as important for preparation for transfer of skills to the clinical learning environment. It was apparent from participants in this study that the Kolb's learning cycle was applied. Learning takes place if clinical supervisors use different innovative teaching strategies in the clinical practice as well as skills laboratories as students have different learning needs and learning styles as expressed by this participant:

Participant 2: "...but I like to do the lecture demonstrations in the skills lab because we have our equipment there." "Like I mentioned I like my bed-side teaching as well demonstrations and then also we use slides. We use PowerPoint."

Clark (2019) describes demonstration as a teaching strategy used to facilitate integrating concepts that engage students in the learning process by assisting students to become useful members of the nursing team in the clinical setting.

Demonstration is one of the phases of the skills laboratory methodology used at the School of Nursing where this research was conducted. The student engages with this phase in groups of 8 - 12 learners before they are placed in the real-life clinical setting. During this phase, students have their first encounter with clinical skills, which are demonstrated by clinical supervisors, and are allowed to ask questions or voice their opinions after the visualization of the skills. It is the researcher's opinion that students should be allocated to the clinical practice environment as soon as possible after demonstration as it has a positive impact and reinforces skills learned in the skills laboratory.

Students develop confidence, better patient management skills and critical reasoning if demonstrations are used in clinical teaching.

4.3.1.2 Category 2: The use of teaching aids to integrate theory into practice in skills laboratory

Teaching aids were considered to be effective for preparation of the transfer of skills to the clinical learning environment. A participant who strongly agreed with demonstrating skills first and incorporating PowerPoint presentations as part of her innovative teaching strategy stated:

Participant 8: "I as supervisor start with the orientation of the skill; that is demonstrating a skill to a student, especially if they see it for the first time... with that the student is visualising the skill. Also, part of what we can use for demonstration purposes is PowerPoint presentations where we incorporate the theory to the practice of the skill that we are going to demonstrate as well."

Maginnis et al. (2010) believe that clinical supervisors should repeat theory when demonstrating clinical skills and support the use of different types of teaching aids such as using videos to blend

theory into the demonstration of a procedure, thereby bridging the gap between theory and practice.. These findings are in keeping with those in a study by McNett (2012) which aimed to identify the effective methods of teaching psychomotor skills. He found that a lecture combined with a demonstration and the use of a computer was more effective than each method used alone.

One participant explained her technique of incorporating theory and practice together with demonstrations, and how more complex skills are simplified into smaller steps to accommodate the learner's needs:

***Participant 5:** “... Also, before I demonstrate I first read the procedure...how to do the procedure and relate it to a theory.” [She used the examination of the ear as an example]*
“I’ll first read to them what is the procedure...what the conditions that can affect that ear are, and we do the management of those conditions. Thereafter, I demonstrate to them how to do the examination step by step ...”


Bruce et al. (2011) stated that students must have information about the procedure demonstrated. Specifically, they must be aware of the crucial points to note during a demonstration. With this in mind, students who prepare themselves for a demonstration ensure that their interest is held as they can correlate what they read in literature with what they observe during demonstrations.

Participants in this study stated that a students' experience during a demonstration session was more likely to be positive when teaching aids were used to assist and internalise theory and practice.

4.3.1.3 Category 3: Self-directed learning in skills laboratory is essential to monitor students' learning process

Self-directed learning in the skills laboratory was viewed as essential to monitoring students' learning process, which helps with the successful transferring of skills to the clinical practice environment. During self-directed learning, nursing students demonstrate the ability to manage and monitor their learning, as well as to plan and implement strategies that may assist them in achieving their goals.

According to one participant, opportunities for self-directed learning (SDL) are available as stated in this quote below:



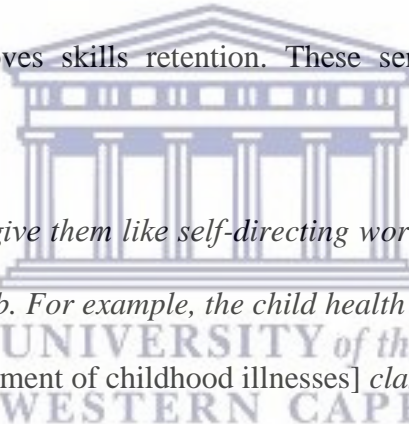
Participant 11: "We have SDL [opportunities] for the students every week...when they go to skills lab... [for] self-directed learning or practice. So they practise the skill. We teach the skill and they practise the skill..."

In the researcher's opinion, the goal is to motivate student nurses to participate in self-directed learning during their clinical skills development at their own pace while using a variety of methods of their own choice. Finkelman and Kenner (2012) suggest that self-directed learning is important for all student nurses since it improves their ability to achieve lifelong professional learning.

Murad, Coto-Yglesias, Varkey, Prokop, and Murad (2010) defines self-directed learning as a process during which individuals take the initiative, with or without the help of others, to diagnose their own learning needs by formulating learning objectives, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes.

The Kolb learning model links well with the philosophy of self-directed learning since learners take decisive actions to bridge the identified gaps based on their individual experiences and reflections on perceived gaps (Kolb & Kolb, 2005). For example, when a learner faces a question that requires knowledge, psychomotor, or affective skills that they do not possess, it promotes learning. Learners then progress through stages of acquiring new knowledge or skills and then return to the first stage to start a new cycle (Kolb, 1984).

According to Murad et al. (2010) self-directed learning is as effective as, or better than, traditional teaching methods for the acquisition of clinical knowledge and attitudes. In the same vein, Brydges, Carnahan, Safir, and Dubrowski (2009, indicate that self-directed clinical technical skills, in turn, improves skills retention. These sentiments are confirmed in this statement by a participant:



Participant 10: "... we give them like self-directing work that they need to do and come present for us in skills lab. For example, the child health students will have to present the IMCI [integrated management of childhood illnesses] classifications."

Shepherd and Burton (2019) agree with this and state that students should be active partakers in the sessions. Simply telling students the clinical supervisors' opinion of the situation or having them observe the supervisor performing a skill does not lead to effective learning.

The review of a study by Murad et al. (2010) revealed that self-directed learning is associated with a moderate improvement in knowledge and suggests that it could be effective in improving the affective and psychomotor domains.

According to participants in this study, students make use of self-directed learning, support each other in groups, and make use of the support of clinical supervisors who assist them during these sessions as illustrated in the quote below:

***Participant 9:** “...we have self-directed learning which the students get encouraged to book because there are clinical supervisors at varsity [university] that they can come and see [supervise]. They [students] can come individually or they come in groups of two or even four, depending on the allocation or the time slots. So they have about an hour to come to self-directed learning to learn on their own but there’s clinical supervisors that are there to also guide them if they have any questions.”*

Clinical supervisors revealed that nursing students perceive self-directed learning in the skills laboratory positively. These findings suggested that when nursing students perceived themselves to be motivated towards self-directed learning, they would successfully self-monitor their learning process, plan and implement learning strategies in order to bridge the identified learning gaps and have the ability to successfully transfer skills learned in the skills laboratory to the clinical practice environment.

4.3.1.4 Category 4: Guided practice in the skills laboratory was perceived important for improvement of motor skills

Guided practice in skills laboratory was perceived to be important for the improvement of students’ motor skills and for the acquisition of knowledge and skills which could be transferred from the skills laboratory to the clinical practice environment. The positive outcomes of a skills laboratory is that students are able to practise the skill until they are competent and confident before utilising the skill in the clinical practice environment with real patients.

The following quotations are from participants who confirmed that after each demonstration, practising a skill is crucial in order to improve their competency:

Participant 5: *“After demonstrating then I allow the students to practise.”*

Participant 7: *“...after the demonstrations we give the students opportunity to practise....”*

Participant 8: *“And then we assist them with guided practices in the skills lab where we can facilitate them if they encounter a problem regarding the skill that they’ve just observed.”*

Literature reviewed indicates that, apart from a skill being well demonstrated, students need enough time to repeatedly practise a procedure. This is a particular phase of clinical teaching used at the School of Nursing which participated in this study. A study by Strand, Naden, and Slettebo (2015) on students’ learning in the laboratory, found that students noted that a hands-on experience helped them to remember clinical skills, however the students emphasised the fact that practical skills need practise.

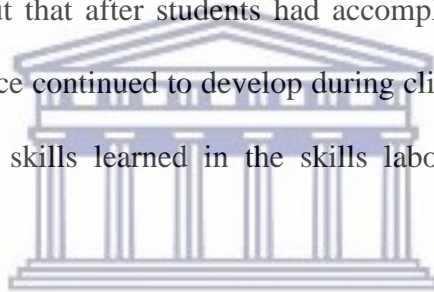
Morgan (2018) believes that attaining motor skills requires practice, and practice entails repetition of a procedure. They indicate that students’ progress through the following three phases:

- Understanding the skill and how to perform it correctly;
- Refining movements and becoming more consistent in performance;
- Practising until the skill is spontaneous so that a student may perform it without thinking about the steps.

Nursing students practise clinical skills under the supervision of the clinical supervisor, who is responsible for assisting and supporting the student as well as complimenting a student when mastering a skill successfully as stated by this participant:

Participant 9: "...you also have individual teaching periods where it is guided practice...it is one on one. You can concentrate on the student's strong points and weak points and lead them and guide them through the weak points and then obviously, compliment them on their strong points so that they also remember to keep on with the strong things."

Clinical supervisors pointed out that after students had accomplished the practical skill in the skills laboratory, their confidence continued to develop during clinical placement, which made it easier for students to transfer skills learned in the skills laboratory to the clinical practice environment.



4.3.1.5 Category 5: Students experienced learning in small groups in the skills laboratory to be effective and hands on

In this study, it emerged that the group sizes in the skills laboratory had increased and many participants found learning and teaching challenging when group sizes are too big. Smaller groups of learners per clinical supervisor enhance the teaching and learning experiences for both the learner and the clinical supervisor.

A participant affirmed that smaller groups allow more time for discussions:

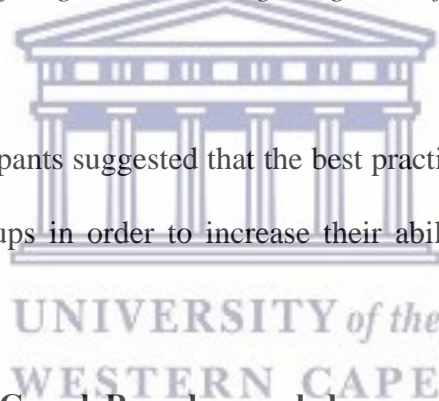
Participant 7: "...and also the small group discussions where we give them an opportunity to discuss what was taught to them."

Simulation works best when there are 8 - 10 learners per group participating in the experience as this enables learning in a safe and supportive learning environment (Maginnis et al., 2010).

Another participant agreed with Maginnis et al. (2010) as it was evident that there were positive aspects about the entire teaching and learning process in the skills laboratory when the group size was small, as clinical supervisors could give individual attention to students.

Participant 3: “But a smaller group would be even nicer because then you can detect who grasps the information, who struggles with the information and you also have an opportunity to spend more time on questions and answers. And before I start a skills session in the lab I first just go around and get a general feel from the students how they feel about that skill.”

In this study most of the participants suggested that the best practice for optimising learning is to divide students into small groups in order to increase their ability to learn and enhance their learning experience.



4.3.1.6 Category 6: Nurse’s Grand Round regarded as useful for discussion of patient diagnosis, nursing care and management

Participants in the study asserted that they feel it is beneficial for students to participate in a Nursing Grand Round that is education specific for the discussion of patient diagnosis and the planning of nursing care and management as outlined in their prescribed workbook and guidelines. This is reflected in the quote below:

Participant 4: “...we go to the psych [psychiatry] sites we get some patients there and [have] some discussion first so that they understand what is expected of them regarding their workbook and the guidelines.”

Laibhhen-Parkes, Brasch, and Gioncardi (2014) believe that Nursing Grand Rounds are an innovative method for nurses to be kept up to date about evidence-based care and knowledge exclusive to their patient population. Odedra and Hitchcock (2012) perceive Nursing Grand Rounds as an effective teaching method as it ensures that the nurse's role is promoted due to its nature, actions and reflections on patients' outcomes.

Participants supported this and believe that Nursing Grand Rounds are a nurse led analysis, review and discussion of patient care, with the outcome being to focus on the role of a nurse and not only the medical interventions. One participant who strongly believed in this practice stated:

Participant 9: "I would actually ask them to do history taking of an unknown patient; someone that they've made up. But they have to choose the diagnosis. Then they need to give me a care plan and then they write and then I can see where their strong points are, and if they understand what a care plan is...and then I guide them with that."

In the researcher's opinion, this teaching strategy improves learners' knowledge, patient care and nursing practices through comparing current practices to evidence-based practice and nursing standards. The findings of this study revealed a need to identify innovative methods of clinical teaching that enhance the socialisation of nursing students to their independent and interdependent role as a professional nurse.

4.3.2 Theme 2: Factors in clinical practice environment that inhibited the transfer of skills from the skills laboratory to the clinical practice environment

This theme generated seven categories that focus mainly on factors hindering the transfer of skills learned in the clinical laboratory to the clinical practice environment such as students being

included in the workforce, high rate of absenteeism, overcrowding of the clinical practice environment as well as conflicting practices.

4.3.2.1 Category 1: Practices in the skills laboratory and clinical practice environment viewed as conflicting

In this study, it emerged that participants feel that students experience transitional difficulties from skills laboratory teaching and learning to the clinical practice environment. Several participants in this study found that there was a difference in the teaching of nursing skills in the skills laboratory and how these skills are applied by nursing staff and students in practice, as stated by the following participant:

Participant 6: "... what the students learn here in the skills lab is also not practised in the clinical environment. So they might learn something here and they go to the hospital and they see something done in a different way. So the way we teach them is not always what is being practised in the hospital because of large amounts of patients that needs to be seen..."

It was clear that the conflicting realities between theory and practice in the clinical settings were of serious concern for the clinical supervisors, as it was confusing and challenging for students' learning. Houghton, Casey, Shaw, and Murphy (2012), believe that clinical supervisors strive to mimic reality in traditional skills laboratories; however, learners often experience difficulties when moving from the simulation environment to the clinical practice environment. A participant explained that students feel that hospital staff are not able to teach skills in the same manner as the clinical supervisor:

Participant 1: “It is very difficult. They are caught in the middle, let me say, they get themselves caught in the middle because here’s a supervisor teaching this and they are in the ward, the professional...senior people [staff] in the ward are doing the total opposite...now the student finds him or herself [ask] do I do this or do I do that? [referring to which practice to follow]. “It is a challenge in all the year levels because the difference in how these students are taught makes a huge impact. The supervisors teach and then when they get into the ward they hardly ever get to see what the supervisors teach them because it is done differently in the ward.”

This highlights the lack of reinforcement of clinical learning in the clinical setting.

Wighus and Bjørk (2018), states that the familiarity of carrying out clinical skills and low staffing levels are often used as reasons why these skills are not executed in the correct manner by qualified nurses and this may hinder the teaching and learning of these skills.

It is the researcher’s opinion that the discrepancy experienced between what is demonstrated in the skills laboratory and what is observed in the clinical practice environment may confuse nursing students and lead to mistrust towards the nursing staff who were observed performing a procedure. Students are often forced to conform to the practices of the qualified staff in the clinical practice environment.

According to one participant, students are taught the steps to follow for managing certain health conditions however, when they get to the clinical practice environment, they find different principals and protocols being applied. As a result, they become confused as to what to follow. A participant confirmed this statement:

Participant 10: *“We do it according to guidelines and policies. But when they go out into the clinical practice it is done differently. For example, we teach them to give a measles injection subcutaneously. Then they go into the setting then the sister, according to them, will tell them that needle is so short it will never reach the muscle.”*

This is evidence of contradicting practices.

The researcher is of the opinion that nursing students should recognized that nursing is dynamic and changes every day, with the result that things in the clinical area could be different due to new evidence-based approaches. This highlights the need for the curriculum to be informed by practice, which can be enhanced by closer relationships between nursing education institutions and nursing practice. It was evident from the findings that there is a gap between the clinical teaching and practice as stated by one participant:

Participant 11: *“Because what we teach is not always what is happening in the clinical placement. So that we, as clinical supervisors, teach the student one thing and when they come to clinical placement they see that things are done differently. And they don’t understand why? And there’s always this issue of what we teach is not always what they’re doing in the clinical placement.” So bringing those two together; marrying those two is not always easy.”*

Participants pointed out that the inconsistency observed in relation to learning and teaching in the simulation laboratory and in the clinical practice environment were due to shortages or insufficient equipment. They found that students need to use their initiative to adapt to the current clinical situation in the clinical practice environment as one participant stated:

Participant 8: “...in the skills lab we try to demonstrate according to the principles of the procedure that we want the student to follow. But now we come in the facility and there may be shortages of equipment or resources that hinder the students to do it according to how we demonstrated in the skills lab. So when the student is there in the facility, the students have to improvise on what method to use to still maintain the principle of the procedure.”

Another participant agreed that the challenges of inconsistency due to lack of resources in real practice leads to individual practitioners performing skills differently:

Participant 7: “So if there’s no equipment available to practise the skill as we taught them in skills lab they won’t be able to practise it according to what we taught them; if the equipment is not available.”...what is demonstrated in the skills lab is not always practised in a hospital environment.”

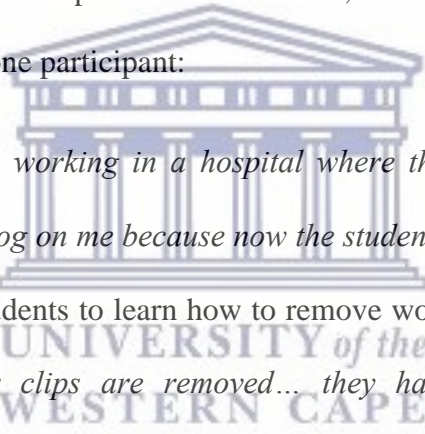
Houghton, Casey, Shaw, and Murphy (2012), in their study on students’ experiences of implementing clinical skills in real life situations, found that students experienced inconsistency between what is taught and what is practised. They advocate a need for principle focused teaching where differences in performing procedures may be allowed as long as certain principles are adhered to.

These findings concur with those of Maginnis et al. (2010) in their study entitled “Transfer of learning to the nursing clinical practice setting”, which revealed that even when students viewed themselves as sufficiently prepared in the clinical laboratory and well equipped for clinical practice, they still found some discrepancies in real practice due to the professional nurse’s preferred way of performing procedures (Magginis et al., 2010).

The findings indicate that when planning students' allocation to the clinical practice environment, it is important that continuity of learning is ensured through synchronising clinical placement with its related theory. Findings also revealed that the lack of integration of theory and practice was due to differences in the management of clients or patients and skill performance in the clinical practice environment.

4.3.2.2 Category 2: Limited clinical learning opportunities to practise nursing skills

From this study it emerged that insufficient opportunities to practise newly acquired skills was problematic. Clinical supervisors in the study revealed that opportunities were inadequate where specific health conditions and clinical procedures were rare, resulting in students being unable to learn effectively as reported by one participant:



Participant 6: “... I am working in a hospital where there’s really no [wound] clips available. It puts a backlog on me because now the student doesn’t get clips”. This refers to the opportunity for students to learn how to remove wound clips. “Or the patients get discharged before their clips are removed... they have it removed at a primary healthcare facility instead. So the opportunities for learning or to meet our students’ outcomes are not always readily available in the hospital as we anticipated it to be.”

It was evident that one of the biggest challenges for clinical learning was the shortage of resources and unavailability of learning opportunities. This highlights the need to ensure that students' clinical placement is appropriate for their learning needs as the response of Participant 6 indicates. The challenge of the lack of equipment and supplies to perform certain skills and students sometimes having to complete their objectives in the skills laboratory in order for them

to reach the due date set by the institution of learning was also highlighted. A participant affirmed this observation:

Participant 7: *“The other challenge that I’ve had, especially when it comes to practising for the students, is the availability of patients for a procedure - meaning that availability of patients for a procedure, for example, especially... full washes. Although they [students] did book or make an appointment with the previous shift they find that the following day there’s no patients available for full wash because full wash is done early in the morning... I see that, clips and sutures, also as a challenge because what can happen is that the student won’t reach his objective in completing this specific skill before the due date and then we have to come to the skills lab, make a booking to at least do the assessment in the skills lab for them to complete their skill by the due date.”*

This is not a favourable option for clinical learning as it prevents the assessment of the student’s ability to transfer the skills from the skills laboratory to a real-life clinical setting.

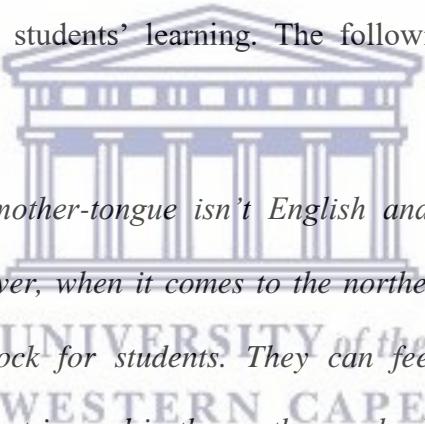
One participant stated that students constantly need to improvise when equipment is not available which could possibly compromise the principle of infection control and patient safety:

Participant 9: *“...if we go to the hospital, the hospital and the clinics don’t have the stock available to do proper wound care or removal of clips. So then they need to improvise.”*

Participants expressed the need for adequate resources in the clinical practice environment to enable students to perform effectively in nursing practice.

4.3.2.3 Category 3: A language barrier exists among students and clinical staff

Language barriers were viewed as an impediment to learning in the clinical learning environment. This category relates to language barriers between nursing students and the clinical nursing staff in the clinical learning environment. Participants reported that there is a language barrier in clinical settings in the Western Cape. Indications are that, the majority of people residing in the Western Cape speak Afrikaans and IsiXhosa. These languages are predominant in clinical practice environments, and most non-Afrikaans and IsiXhosa speaking students feel excluded from discussions about the care of patients. Participants also stated that the use of a language different to the students' mother tongue or the language of instruction in the clinical practice environment can stifle students' learning. The following comment was made by a participant:



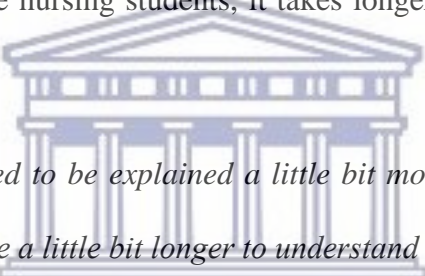
Participant 3: "Their mother-tongue isn't English and that can be one of the big inhibiting factors. However, when it comes to the northern suburb hospitals, Afrikaans can be a stumbling block for students. They can feel left out. Because it is the predominant language that is used in the northern suburbs. Then culture, depending on their own culture [referring to the student] that too can affect how they learn...the student where English is a second or a third language, they have major challenges coping with just reading and understanding. And then you also have problems with accents. Because they may understand English well but adjusting to accents, different accents can be a challenge for the student as well for learning."

The researcher is of the opinion that students come from diverse backgrounds and, while English is the medium of communication in the clinical setting, for many students it is not their first or home language and this language barrier impedes students' learning in the clinical practice

environment. This creates conflict and as a result, students find it difficult to transfer skills into practice. The importance and role of communication in everyday life cannot be overemphasised; it is essential in every situation that involves the exchange of ideas, knowledge and in performing daily activities in any organisation and institution (Wittayapun, Tanasirirug, Butsripoom, & Ekpanyaskul, 2013).

Additionally, it is expected of nursing students to communicate effectively with their patients, registered nurses and other members of the health team.

One participant reported that teaching students in a second language added to students learning challenges and felt that for some nursing students, it takes longer to understand as stated in the following quote:



Participant 9: “They need to be explained a little bit more maybe because of language barrier... or they just take a little bit longer to understand than other students do....”

Kurki (2018) are of the opinion that communication barriers could make it difficult to interact with people who are not from the same culture and do not speak the same language. Waldock (2010) further explains this dilemma by specifying that poor communication could affect nursing students’ performance. Furthermore, he emphasised that language and effective communication are crucial in the nursing profession.

Several participants from the study suggested that students experience difficulty in transferring clinical skills due to nursing staff members using a language that the learner did not understand. This has been reported to impact negatively on interpersonal relations and teamwork among nursing staff as well as clinical supervisors.

4.3.2.4 Category 4: Negative attitude of nursing staff in the clinical practice environment

Nursing staffs' attitudes were reported as impacting negatively on students' learning. According to the participants in this study, this gave students a bad impression about the clinical practice environment. There were reports of nursing staff being reluctant to share their nursing experience.

Students are placed in the clinical practice environment in order for them to transfer skills that they have learned in the skills laboratory. They are expected to practise nursing skills in order to become competent practitioners.

According to one participant, students feel intimidated by nursing staff; however, it was noted that this did not happen to all students. A participant reported:

Participant 7: "They don't even feel free to ask the Sister; Sister, I would like to practise this specific procedure. Because they know that Sister is not going to allow them to practise..."

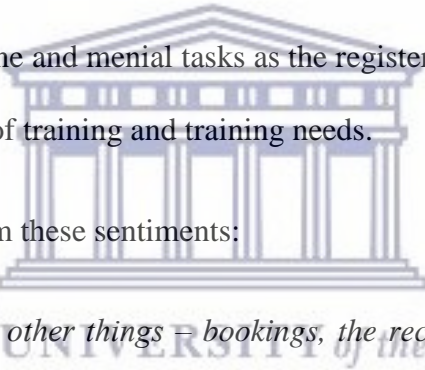
Sweifach (2019) argues that factors that inhibit students' learning in a clinical practice environment include inadequate or little opportunity to practise and to work with registered nurses, lack of commitment to teach student nurses, and non-acceptance of students as active participants in patient care.

A research study conducted by Mampunge (2013) in the Eastern Cape investigated the experience of final-year nursing students at a public college regarding their preparedness to become registered nurses. The study found that clinical staff were too busy or not willing to teach the students in the wards, which affected students' competencies. The clinical practice environment is defined as an "interactive network of forces within the clinical setting which

influence students' clinical learning outcomes" (Klemenz, 2019). Clinical reflection and clinical teaching in a practice based multi-professional learning environment. . This implies that the clinical learning of nursing students depends on a supportive learning environment, which includes nursing staff, clinical supervisors and other health team members who are involved in students' clinical learning. It is their responsibility to ensure that the clinical practice environment is conducive for students to learn. D'Souza et al. (2013) emphasise that a supportive clinical practice environment is important to the success of the clinical teaching process.

One of the participants reported that the nursing staff are perceived to be uninterested in teaching students and took advantage of them. As a result, student nurses spent most of their time in the clinical environment doing routine and menial tasks as the registered nurses do not delegate tasks to them according to their level of training and training needs.

The following quotations confirm these sentiments:



Participant 4: *"They do other things – bookings, the record, the papers, the stationery and all other things. There's not much to do in terms of the patient because not everybody is interested in teaching students." "...Other staff are not interested in teaching what we have already taught the student or demonstrated."*

This study revealed that the attitude of nursing staff towards students influences nursing students' learning. Nursing staff are perceived to be uncaring and expect students to become competent without providing any professional guidance during their placement in the clinical practice environment, thus preventing them from transferring skills learned in the skills laboratory to the clinical practice environment.

4.3.2.5 Category 5: Students are used as part of the workforce in the clinical practice environment

One major category that emerged from the study was that students were treated as workers to cover staff shortages and not as learners which prevented students from practising skills that they learned in the skills laboratory in the practice environment.

Nursing staff do not allocate students to nursing activities according to their objectives, learning needs or level of experience. Instead, students are placed according to the needs of the facility, which affects their clinical learning and achievement of their objectives as stated by this participant:



Participant 5: "When they are placed they are placed to work. There is no time for them to be taught because of the shortage of staff...Sometimes, let's say, the objective of the student is to do vital signs, they're not going to place the students on the vital signs. They will place the students according to their needs of the facility."

From the researcher's point of view, the clinical practice environment at times becomes stressful when there is a shortage of nursing staff. According to Waldock (2010), nursing staff feel that their increased workload prevents them from providing adequate supervision for nursing students' in the clinical practice environment.

One participant agreed with Waldock's (2010) statement and said the following:

Participant 1: "I think the nursing staff tend to forget that they are students and they need to learn. They...take them as part of the working force and they...overlook that they need to be taught, they need to be mentored. As much as they spend 12 hours in the facility when it comes to guidance there is very minimal guidance that the students get."

Findings from this study show that students are regarded as workers to cover staff shortages and are sent to perform errands, including going to theatre, x-ray and the laundry among other things instead of learning, as one participant stated:

***Participant 9:** “I went there [referring to the facility] when I got there...the student was still not in the ward. So they send the students all over or they send the students for long periods of time and the students don’t get relieved.”*

A study by Morley (2018) on students’ experiences of their clinical learning at a private hospital in South Africa, found that students often complained about being treated like an extra pair of hands to cover staff shortages and not being allowed to complete their clinical learning outcomes. The following quote illustrates this:

***Participant 7:** “...the challenge that we do have at the facility is the shortage of staff. For instance, if there’s shortage of staff it is an extra burden on the student meaning, it is impossible for them to practise because the Sisters in the hospital usually see the students as part of their workforce... They [referring to the students] will end up with extra work due to the shortage of staff.”*

It was evident that nursing student was regarded as as workers to cover staff shortages.If attempted to work on their objectives,opportunities were not granted by nursing staff.

4.3.2.6 Category 6: Clinical practice environment is overcrowded with students competing for learning opportunities

There is increasing competition to place nursing students at clinical practice environment sites. Students from the university participating in this research are placed in the same clinical practice

environment as students from other nursing education institutions. This results in limited available space for students and limited learning opportunities.

Student congestion in the clinical learning environment negatively affects student learning. A participant confirmed this observation:

Participant 10: *“In the clinical settings...sometimes you would find two nurses working in the same room and then there’s two students as well. There’s students from other universities and nursing colleges and they are not actually exposed to all of their objectives and aims that they should reach.”*

This concern was echoed by another participant, who reported that students had difficulty in reaching their objectives and that clinical practice environments are overcrowded with students from other institutions, leading to competition to access learning opportunities and a strain on resources. The quotations below illustrate one participant’s concerns:

Participant 11: *“...All the equipment that we teach with is also not available in the MOUs” “...the clinical placements are very crowded with students, which make their learning opportunities very little.”*

Congestion of students in the clinical practice environment has been found to have negative implications for students’ clinical learning (Chan, 2013).

An influx of students in the clinical setting may lead to competition for opportunities for clinical learning, and tension among students may arise, as pointed out by one participant:

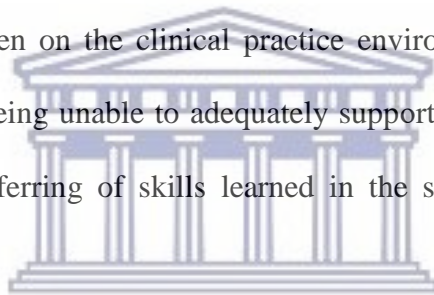
Participant 9: *“...all the students in facilities compete for patients with a specific assessment... So it is not only that one student or the students that I have for assessments*

that need to be assessed, but all the other second year or first year students that also have to complete that specific procedure.”

Another participant said:

Participant 11: *“So you know that the hospitals are also overcrowded with students because we have so many teaching institutions at the moment, especially for midwifery. So the clinical placements are very crowded with students which make their learning opportunities very little actually.”*

If large numbers of nursing students are allocated to a ward or unit, it can negatively affect their learning and increase the burden on the clinical practice environment. This results in clinical supervisors and nursing staff being unable to adequately support the students’ clinical learning. This leads to ineffective transferring of skills learned in the skills laboratory to the clinical practice environment.



UNIVERSITY of the
WESTERN CAPE

4.3.2.7 Category 7: High rate of student absenteeism from the clinical practice environment

According to participants in this study, students’ absenteeism from the clinical practice environment results in them missing opportunities to practise skills. It was also evident from discussions that students themselves contributed to missed opportunities for clinical learning as one participant stated:

Participant 4: *“One other thing is the absenteeism, you did all the effort to educate the student and ...Now is the time that you go there, they’re absent.”*

Nursing students are required to work a certain number of clinical hours as stipulated in the guidelines of the South African Nursing Council (SANC) Regulation, No. 425 of 22 February, as amended. In a previous study by Teixeira (2016), there appears to be no definite cause for the high rate of absenteeism among nursing students. However, one of the participants in this study suggested some reasons for student absenteeism and reported that nursing students are not committed to their learning and development which is supported in the following quotation:

Participant 2: "...students don't always come to work. They stay absent. They stay absent if they're writing tests. They stay absent, okay, exam times are slotted. It is different. But students stay absent many times for various reasons."

Participants stated that family commitments and especially financial problems are the most common contributory factors for nursing students' absence from work. In addition, most nursing students have private jobs where they work to earn extra money to provide for their family and for travelling expenses as illustrated in the quote below:

Participant 6: "...their financial burdens as well, every student has a different financial need and some of them just don't have money to come to hospital for whatever reason. They might be a breadwinner in the house and they don't always have funds available to come to hospital"

Another participant said:

Participant 7: "I had students who even inform me on the day...Sir, I don't know whether I'm going to be here the following week because I don't have money."

Students need to spend time in the clinical practice environment in order to accomplish their learning objectives. This requires them to use their own initiative to overcome challenges and successfully learn in the clinical practice environment.

While not refuting the extent of students' personal challenges, it is the researcher's point of view that students need to be responsible for their own learning. Lack of motivation for learning can negatively affect the acquisition of professional skills necessary for students to become competent nurses.

4.3.3 Theme 3: Challenges related to the skills laboratory that inhibited the transfer of skills from the skills laboratory to the clinical practice environment

This theme generated two categories which mainly focus on the challenges that students encounter while striving to find suitable practical learning opportunities in the skills laboratory.

4.3.3.1 Category 1: Skills laboratory is overcrowded

It was apparent from the findings of this study that participants viewed the skills laboratory as an environment that was not conducive for learning. Noise levels, overcrowding and student overflow at stations at bedsides were of major concern. This resulted in students feeling demoralised and losing interest, which could negatively affect their learning.

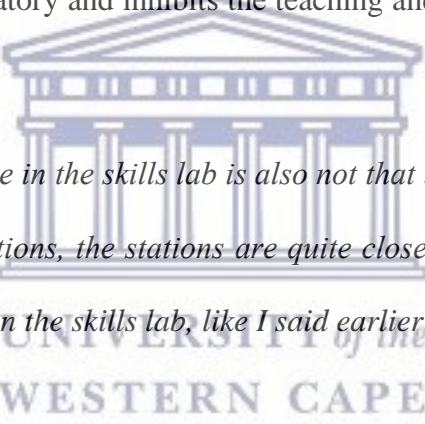
According to one participant, students were not paying attention and clinical supervisors had difficulty transferring knowledge as illustrated below:

Participant 12: "I would say we have really big groups. And what I have as a challenge - some of the students are not really taking note in the class because the groups are too big. I would say some really do listen and pay attention in class. But now because of the

big group that you're having you are interrupted when you're bringing across your procedures or with the content that they need to learn or being taught for the day."

A study by Salifu (2016) on students learning in the skills laboratory found that a hands-on experience helped students to remember clinical skills. Students emphasised the fact that practical skills need practice, and overcrowded skills laboratories combined with poor practice time were associated with a poor learning experience.

One participant expressed concern about the lack of physical space to accommodate large numbers of students in the clinical practice environment. This prevents students from fitting comfortably into the skills laboratory and inhibits the teaching and learning process as expressed below:



Participant 6: *"The space in the skills lab is also not that big and if you're going to make use of seven or eight stations, the stations are quite close together". "And then also the overcrowding of groups in the skills lab, like I said earlier on, it also inhibits the teaching and learning process."*

Another participant agreed that there is a need for more space, and reflected on the lack of physical space, stating that a crowded skills laboratory can increase noise levels, which can hinder the students' learning process as reported below:

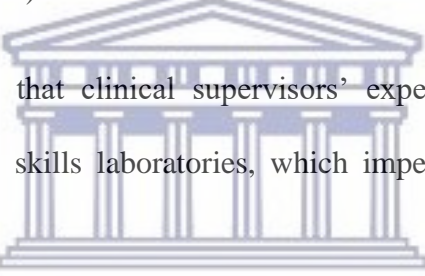
Participant 5: *"And the other thing that can hinder their learning...at the moment we have a large number of people coming into skills lab. It is a big noise and it is difficult for us to hear properly."*

Large, noisy groups of learners diminish the learning experience for many participants as well as their students. One participant reflected on her experience when teaching a large student group in a crowded skills laboratory:

Participant 7: *“It is not really so conducive because you must remember the skills lab is very compact. We, as supervisors, demonstrating quite next to each other. We can hear what the other one is saying, the noise level is really high. So when the noise level is high it is difficult for the students sometimes to actually listen to what you are teaching them.”*

Ensuring that every student has a clear view of the demonstration is essential for an effective clinical demonstration (Bray, 2014) but is difficult to achieve if student numbers are too large .

It was evident from the study that clinical supervisors’ experienced challenges with large numbers of nursing students in skills laboratories, which impedes clinical learning as stated below:



Participant 8: *“In some sense the skills lab, the environment can become crowded and that in turn hinders the students’ learning process. Especially if there’s a huge crowd of students and the ratio of students and supervisor... for instance, one supervisor at a bed and there’s about 15 to 20 students at one station. So the supervisor won’t be able to attend to all of those students and therefore hindering their learning process.”*

Participants in the study found that the physical space did not accommodate the large numbers of nursing students comfortably and had a negative impact on clinical teaching and learning.

4.3.3.2 Category 2: Demonstration equipment in the skills laboratory is outdated

The use of outdated equipment for demonstrations in the skills laboratory was reported as a challenge.

Participants expressed their concerns about outdated equipment, such as vials, needles and mannequins. This was perceived as a challenge for student learning. These realities are aptly captured in the excerpt below:

Participant 10: “Here in the clinical skills lab we would find that our medication is outdated, especially the vials. Some of the needles that we use for children we don’t find here in skills lab.”

It was clear that the biggest challenge for learning in the skills laboratory is inadequate resources. In this study, the skills laboratory at this specific university replicates a hospital ward with the equipment and supplies as found in a hospital setting. Ricketts (2011) states that the degree of fidelity and complexity of the simulation must be thoughtfully developed, based on the availability of equipment and learner factors.

The lack of resources was confirmed by another two participants, who expressed their concerns and suggested possible ways of improving learning in the simulation laboratory:

Participant 6: “So the mannequins for example, some of them are updated; some of them are not. So maybe we could have an upgrade in the mannequins or the equipment that we’re using that is outdated. I think everybody in the healthcare setting is moving with technology and I think we as a university needs to do the same in clinical teaching as well as in teaching in the class room...”

Participant 5: “... I think the improvement that they can have is that the dolls that we have are very old. And then their pictures are not nice to see. So when you want to check for abnormalities it is not easy to identify what is normal. I think they can try to change those models and use maybe new models that are more specific.”

According to van Vuuren, Goon, and Seekoe, (2018) learners are expected to be given hands-on, rapidly paced challenges and modern tools to facilitate their learning. Some learners are accustomed to rapid sensory stimulation as a result of digital technology.

Another participant confirmed this observation about the unavailability of learning resources such as suturing material, which inhibits students from correctly practising skills in the skills laboratory.

Participant 12: “...especially with abdominal assessments our mannequins do not work properly. So that also inhibits the students from doing the palpations correctly on the mannequins. Even when they have to learn how to suture, they cannot utilise the suturing material because there’s not enough suturing material for each student to learn how to do those things...’

Salifu, Gross, MSalifu, and Ninnoni (2019), reported in their study that there is insufficient and/or outdated equipment in their simulation laboratories to support students’ learning.

Participants expressed the need for updated equipment in the skills laboratory in order for them to effectively demonstrate skills to students in the skills laboratory and compared the equipment to what is currently available in the clinical learning environment as illustrated below by some participants:

Participant 3: “...because our resources are quite different and the resources in the skills lab may be a little outdated. In the clinical area they may have more current and modern equipment in use and at times they may not have some of the resources; the supplies that the students need to perform procedures.”

Participant 8: “We have the skills lab and we have some problems ...such as outdated technology, the dolls that’s are outdated. So we are unable to effectively demonstrate the skills to the student.”

Participant 9: “...we don’t always have the recent updated protocols... or the equipment that is used in the hospitals... the underwater drainage that is used in the skills lab isn’t the same used in a hospital.”

Participants in the study found that equipment used for demonstrations in the skills laboratory is insufficient and outdated. According to participants, most clinical learning environments are supplied with advanced technologies, equipment and supplies. Furthermore, the responses from participants indicate that nursing students practise in the skills laboratory on outdated equipment and utilise supplies that are no longer being used in practice.

4.4 Summary

In this chapter the findings of the study was discussed. The findings clearly indicate that clinical supervisors uses different teaching styles and methods for clinical teaching also that the nursing students experience challenges in both the skills laboratory and clinical learning practice environment. These challenges inhibit their learning and the transfer of skills learned in the skills laboratory to the clinical practice environment.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATIONS AND LIMITATIONS

5.1 Introduction

In the previous chapter, the findings of this study were presented, and existing literature was used as a control, thereby highlighting what this study added to the existing body of knowledge and what it confirmed or refuted in literature regarding the researched phenomenon, namely clinical supervisors' perception regarding nursing students' transference of skills from the skills laboratory to the clinical practice environment. Verbatim quotations from the interviews with participants were provided to support the findings, ensuring richness in the presentation. In this chapter, the findings are summarised, recommendations for the nursing education, clinical practice and future research are made and the limitations of this study are provided.

The objectives of the study were to explore the following:

- The perceptions of clinical supervisors regarding nursing students' skills transfer from the skills laboratory to the clinical practice environment.
- The clinical supervisors' perceptions about the challenges with students' skills transfer from the skills laboratory to the clinical practice environment.

5.2 Summary of the findings

The summary will be discussed under the three main themes that emerged during the data analysis. These themes were generated from a number of categories (see Table 4.1).

5.2.1 Theme 1: Factors that promoted skills transfer were related to the clinical education process and student learning

Findings in the study revealed that some teaching methods achieved effective clinical learning for students. The findings highlight the need for effective preparation of learning sessions, including methods to demonstrate the skill and optimise learning opportunities during clinical skills laboratory sessions and in the clinical learning environment.

In this study there was no agreement among participants as to what constitutes best practice in the demonstration technique used. It appears that participants have their own unique preferred learning styles. According to Hanafi (2019), learning styles refer to individual approaches on how the student takes in, organises and processes information; depending on their individual strengths and preferences. As a result, some individuals prefer to process information in a step by step format, while others prefer to see the bigger picture before they can master the details (Hanafi, 2019). The clinical supervisors suggested that dividing students into small groups would allow for more practice time and clinical supervisors could better facilitate student learning. This is supported by Bray (2014), who suggests that the clinical supervisor to student ratio has an influence on the technique chosen to demonstrate a skill and the time available for students to practice. Bray (2014) also found that a high student to facilitator ratio per clinical demonstration session is associated with poor learning outcomes, while small group teaching facilitates learning.

5.2.2 Theme 2: Factors in clinical practice environment that inhibited the transfer of skills from the skills laboratory to the clinical practice environment

This research revealed that students are faced with many challenges during their clinical placement in the clinical practice environment relating to conflict of practices. It was found that

clinical supervisors taught nursing students techniques during clinical teaching, but when nursing students are in the clinical practice environment, the same methods are not applied. Clinical supervisors agreed that there are times when nursing students become confused when what they have learnt in class is not what they experience in the clinical practice environment. It is the researcher's opinion that the differences between what is demonstrated in the skills laboratory and what is observed in the clinical practice environment leads to confusion and mistrust towards the nursing staff who they observe performing the procedure. As mentioned in the literature in chapter two, conflicting practices also affect nursing students' clinical competency.

The researcher noted that clinical supervisors were particularly concerned that students were not given an opportunity to practice skills that they learnt in the clinical practice environment. This could result in students not being able to achieve the appropriate level of competence required in the clinical environment. Clinical supervisors were of the opinion that as much as students were concerned about inadequate learning opportunities, they also experienced language barriers between themselves and clinical staff while performing their daily duties. In this study, clinical supervisors agreed that language barriers affect the nursing students' learning and development. It is clear from the findings that language and effective communication are fundamental in the nursing profession as students are expected to communicate effectively with patients.

Absenteeism of students from the clinical practice environment was highlighted as an inhibiting factor, which was a major concern for clinical supervisors. Absenteeism causes students to miss out on learning opportunities which hinder learning progress. Participants also reported that clinical practice environments were congested and overcrowded with students from other institutions with the result that students experience difficulty in meeting their learning outcomes.

Clinical supervisors felt that students perceived a lack of staff involvement as well as intimidation of students by clinical staff. Students are perceived as being inexperienced and are given non-nursing tasks to do instead of being allocated according to their level of experience and learning objectives. Kaphagawani and Useh (2013) mentioned that a supportive clinical practice environment is one good inter-personal relationships, communication and support among nursing staff and nursing students, all of which creates a conducive learning environment essential for students in the clinical setting. The authors further stated that in a constructive clinical practice environment, students need to be given opportunities to practice a variety of nursing skills in order to gain confidence and learn from their mistakes.

Clinical supervisors in this study agreed that a shortage of staff is also a major problem in the clinical practice environment. It is not always possible to plan the nursing students' clinical learning activities on a daily basis, due to staff shortages and an increased patient workload, thereby inhibiting the students' opportunities to transfer skills learned in the skills laboratory to the clinical practice environment. Findings show that during times of severe staff shortages, certain tasks are allocated to nursing students to ensure that patients receive care, irrespective of the student's learning needs.

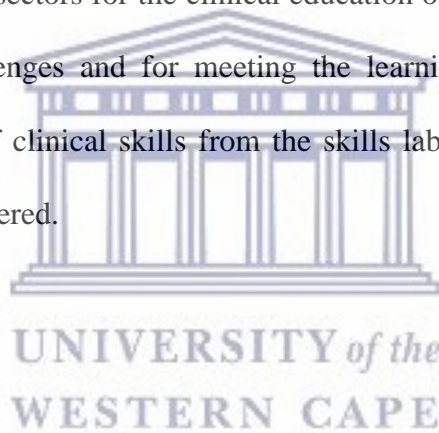
5.2.3 Theme 3: Challenges related to the skills laboratory that inhibited the transfer of skills from the skills laboratory to the clinical practice environment

The study revealed the diverse challenges that nursing students encountered which impact on the successful transfer of skills learned in the skills laboratory to the clinical learning environment. Clinical supervisors expressed their concern about the lack of space in the skills laboratory due to overcrowding. They mentioned that this overcrowding makes it difficult for students to learn. Clinical supervisors also reported that small and overcrowded workstations resulted in high noise

levels, which interfered with students' learning. The use of out-dated equipment for demonstration of skills was also viewed as a challenge as it results in confusion when students are placed in the clinical practice environment and have to use updated equipment for patient care.

5.2.4 Summary

Increased collaboration between the clinical practice environments and the university where this study was undertaken would strengthen the working relationships between supervisors and students and enhance clinical teaching and learning. A dual responsibility between nursing education and clinical practice sectors for the clinical education of nursing students has potential for overcoming existing challenges and for meeting the learning needs of nursing students. Improvement in the transfer of clinical skills from the skills laboratory to the clinical practice environment would also be fostered.

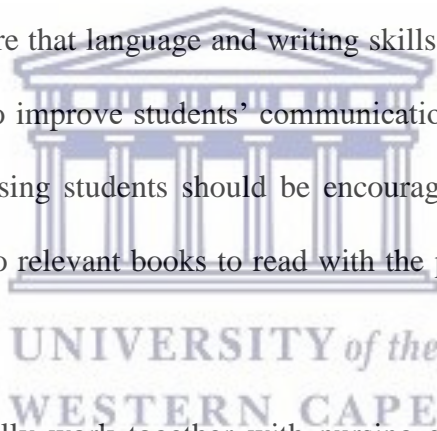


5.3 Recommendations

5.3.1 Recommendation for nursing education

- The university must communicate any changes in the nursing programme to nursing staff and management of the clinical practice environment to ensure that nursing students' clinical learning remains appropriate and relevant to their learning outcomes.
- The university must communicate the nursing students' learning outcomes to nursing staff in order to prepare them for the student's learning needs in the clinical environment. Nursing students must receive appropriate supervision and guidance from nursing staff while in the clinical practice environment for clinical learning.

- Clinical education workshops should be conducted on an ongoing basis by the university under study with the aim of providing updates on clinical nursing skills and the sharing of knowledge and skills between clinical supervisors and clinical nursing staff. This intervention will ensure standardisation of skills taught to students and practiced in the clinical environments.
- The clinical supervisors in collaboration with the nursing staff in the clinical practice environment must ensure that student nurses attain the required levels of proficiency in their nursing skills for each of their clinical placements as stipulated in the clinical workbooks.
- The university must ensure that language and writing skills (academic literacy) are part of the nursing programme to improve students' communication with their patients and other health professionals. Nursing students should be encouraged to use the library facilities where they have access to relevant books to read with the purpose of improving their use of the English language.



The university must purposefully work together with nursing staff from the clinical practice environment to assist students with transfer of skills learnt in the skills laboratory to the clinical practice environment. This can be achieved through frequent meetings and clinical updates between all nursing staff and clinical supervisors involved in student teaching from the specific university. This will ensure that challenges experienced by the nursing students will be discussed and solutions sought.

5.3.2 Recommendations for nursing practice

- Registered nurses should be accountable and responsible for clinical teaching and for ensuring that the nursing students meet their learning outcomes in the clinical environment.

- The nursing staff should refer any problems immediately to the clinical supervisors. Problems should include student absenteeism, lack of reaching clinical outcomes and the availability of learning opportunities.
- Nursing staff should ensure that nursing students are familiar with the clinical practice environment and able to perform the required nursing skills in the clinical practice environment at their level of training.
- The Registered Nurse at the clinical practice environment should ensure that the nursing students are not utilised to fill the shortfall in the staffing needs in the ward/unit.
- Nursing staff in the clinical practice environment must be encouraged to attend cultural diversity workshops. This could improve interpersonal relationship between themselves and nursing students.
- Nursing staff in the clinical practice environment must adhere to nursing protocols by using the prescribed official language, namely English which is understood by all health care professionals and nursing students in the clinical practice environment.
- Registered nurses at the clinical practice environment must ensure the availability of clinical equipment and other resources while nursing staff, nursing students as well as clinical supervisors should be educated on cost containment in order to ensure the availability of resources needed for nursing students to reach their clinical objectives and to enhance effective learning.
- Nursing staff should create a positive clinical practice environment for nursing students through adherence to nursing standards in order to promote quality clinical learning. Should a situation arise where these standards divert from the norm, nursing staff should

use it as a teaching opportunity in order to maintain trust with the student and prevent confusion.

- Registered nurses must encourage good interaction among all nursing staff and other health care professionals in the ward to encourage the development of student nurses in their professional roles. Creating a good atmosphere and relationships in the clinical practice environment is regarded as essential to the student nurses' learning process. Therefore, nursing staff should be required to ensure that students feel part of the nursing team and provide support during the learning process.

5.3.3 Recommendation to research

The study has provided an understanding of clinical supervisors' perceptions about the challenges that affect students' skills transfer from the skills laboratory to the clinical practice environment. However, nursing students' clinical skills are extensive and clinical practice environments change over time.

The following suggestions for future research are recommended:

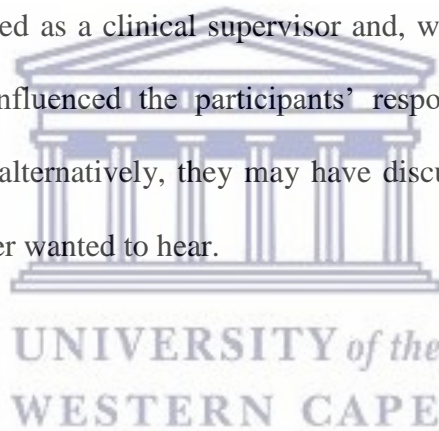
- This study was limited to clinical supervisors only, therefore further research is recommended where nursing students and nursing staff provide their perceptions of challenges with regards to students' skills transfer from the skills laboratory to the clinical practice environment.
- A study at all accredited clinical learning sites where nursing students are placed for clinical learning is recommended to determine the factors hindering students' skills transfer from the skills laboratory to the clinical practice environment.

- Further research is also recommended to determine how the allocation of students to the different clinical wards/units and the duration of clinical placement may inhibit students' skills transfer from the skills laboratory to the clinical practice environment.

5.4 Limitations

The following limitations of this study were identified:

- The study was conducted at one university in the Western Cape where the participants were employed as clinical supervisors. Therefore, the findings of this study cannot be generalised to other clinical supervisors at other institutions and in a different context.
- The researcher is employed as a clinical supervisor and, was also the interviewer for this study. This may have influenced the participants' responses as they might not have discussed issues openly; alternatively, they may have discussed among themselves, what they thought the researcher wanted to hear.



5.5 Summary

The findings of this study revealed that nursing students are not learning effectively in the clinical practice environment and experience challenges in transferring skills learnt in the skills laboratory to the clinical practice environment. The study was based on Kolb's Experiential Learning theory, which informs experiential education. Recognising that nursing is a practice-based profession and that experiential learning theory emphasises learning through doing and reflection, this framework was found to be relevant to this study.

REFERENCES

- Abrahams-Marra, D. (2013). Guidelines for clinical facilitators, to support student nurses in a simulation laboratory at a college of nursing in the Western Cape. Unpublished full master's thesis. University of the Western Cape
- Albloushi, M., Alghamdi, R., Alzahrani, E., Aldawsari, A., & Alyousef, S. (2019). Nursing Education Challenges from Saudi Nurse Educators' and Leaders' Perspectives: A Qualitative Descriptive Study. *International journal of nursing education scholarship*, 16(1).
- Aloush, S. M. (2019). Lecture-based education versus simulation in educating student nurses about central line-associated bloodstream infection-prevention guidelines. *Journal of Vascular Nursing*. <https://doi.org/10.1016/j.jvn.2018.11.006>
- Anney, V. N. V. (2014). Ensuring the quality of the findings of qualitative research: looking at Trustworthiness Criteria. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*, 5(2), 272–281. Retrieved from [http://jeteraps.scholarlinkresearch.com/articles/Ensuring the Quality of the Findings of Qualitative Research NEW.pdf](http://jeteraps.scholarlinkresearch.com/articles/Ensuring%20the%20Quality%20of%20the%20Findings%20of%20Qualitative%20Research%20NEW.pdf)
- Alinier, G., Hunt, B., Gordon, R., & Harwood, C. (2009). Effectiveness of intermediate- fidelity simulation training technology in undergraduate nursing education. *Journal of advanced nursing*, 54 (3), pp 359 – 369.
- Archer, E. & van Heusden, M. (2011). Improving undergraduate clinical supervision in a South African context. *African Journal of Health Professions Education*. 3(2): 2011.
- Arkan, B., Ordin, Y., & Yilmaz, D. (2018). Undergraduate nursing students' experience related to their clinical learning environment and factors affecting to their clinical learning process. *Nurse education in practice*, 29, 127-132.

- Babbie, E., & Mouton, J. (2014). Qualitative methods of Data sampling. *The practice of social research*, 7, 187-193.
- Baglin, M. R., & Rugg, S. (2010). Student nurses' experiences of community-based practice placement learning: a qualitative exploration. *Nurse Education in Practice*, 10(3), 144-152.
- Bland, A. J., Topping, A., & Wood, B. (2011). A concept analysis of simulation as a learning strategy in the education of undergraduate nursing students. *Nurse education today*, 31(7), 664-670.
- Botma, Y., Greeff, M., Mulaudzi, F.M., & Wright, S.C.D. (2010). *Research in Health Sciences.South Africa:Pearson Education(Pty)Ltd.*
- Bray, F. (2014). Student views on their early clinical learning experiences. Mini Theses P PH. Western Cape: Stellenbosch University.
- Brink, H.I. (2012) *Fundamentals of Research Methodology for Healthcare Professionals*. Cape Town: Juta & Co.
- Brink, H., Van der Walt, C., & Van Rensburg, G. (2012). *Fundamentals of Research Methodology for Health Care Professionals*. Cape Town: Juta Publishers.
- Bruce, J.C., Klopper, H.C. and Mellish, J.M. 2011. *Teaching and learning the practice of learning*. 5th Edition Butterworth.
- Bruce, G., & Johnson, S. (2019). Nursing technology: the application and development of scene simulation in nursing education. *Language*.
- Bruce, J.C., Klopper, H.C., & Mellish, J.M. (2011). *Teaching and learning the practice of learning*. 5th Edition Butterworth.
- Brydges, R., Carnahan, H., Safir, O., & Dubrowski, A. (2009). How effective is self-guided learning of clinical teaching skills? It's all about process. *Medical Education*, 43, 507-515.
- Burns ,N.& Grove ,S.K 2012.*Understanding nursing research:Building an evidence-based practice,Elsevier Health Science*
- Burns, N., Grove, S.K., & Gray, K. (2011). *Understanding Nurses – Building on Evidence Based Practice*. 5th Edition. St Louis, Missouri: Elsevier Saunders Publishers.

- Burns, N., Grove, S.K., & Gray, K. (2014). *The practice of nursing research: (7th Ed)*. Amsterdam: Elsevier United States of America: Saunders.
- Cambridge Advanced Learners Dictionary. (2013). 4th Edition. Cape Town: Cambridge University Press.
- Chan, D. (2013) Development of the clinical environment inventory: Using the theoretical framework of learning environment studies to assess nursing students' perceptions of the hospital as a learning environment, *The Journal of Nursing Education*, 41(2), 69-75.
- Chuan, O.L. & Barnett, T. (2012). *Student tutor and staff perceptions of clinical learning environment. Nurse Education in Practice*, 12, 192-197.
- Clark, V. L. P. (2019). Meaningful integration within mixed methods studies: Identifying why, what, when, and how. *Contemporary Educational Psychology*, 57, 106-111.
- Corlett, J., Palfreyman, J.W., Staines, H.J. & Marr, H. (2010). Factors influencing theoretical knowledge and practical skills acquisition in student nurses: An empirical experiment. *Nurse Educator Today*, 23. 183-190.
- Copenhaver, M. (2018). Using Clinical Supervision to Improve Interprofessional Collaboration.
- Crafford, I., Kilian, C., Moore-Saayman, R., Dreyer, J., & Rossouw, M. (2019). Learning in simulation: Nurse educator ready? Steady? GO!. *Professional Nursing Today*, 23(1), 35-41.
- Creswell, J.W. (2013). *Research designs: A qualitative, quantitative and mixed method approaches*. Sage Publications.

- D'Souza, M.S., Venkatesaperumal, R., Radhakrishnan, J., & Balachandran, S., (2013). Engagement in clinical learning environment among nursing students: Role of nurse educators. *Open Journal of Nursing* 3:25-32.
- Dale, B. (2013). What factors facilitate good learning experiences in clinical studies in NURSING: Bachelor Students perceptions? *International scholarly research notices (ISRN) Nursing* 2013. 1-7
- Doody, O. (2014). Setting a research question, aim and objective. *Nurse Researcher*, 23(4), 19–23.
- De Vos, A. S., Delpont, C. S. L., Fouché, C. B., & Strydom, H. (2011). *Research at grass roots: A primer for the social science and human professions*. Van Schaik Publishers.
- De Vos, A.S., Strydom, H., Sculzhe, S., & Patel, L. (2011). Research at the grassroots for the social sciences and human service professions, 4th ed. Pretoria: *JL Van Schaik Publishers*
- Dlamini, CP. (2011). *Perceptions of students and nurse educators on the integration of theory and practice in nursing education in Swaziland. An exploratory descriptive study*. Unpublished master's dissertation. KwaZulu-Natal: University of KwaZulu-Natal.
- Donough, G. (2014). *Perceptions and experiences of undergraduate nursing students of clinical supervision*. Retrieved from <http://scholar.sun.ac.za>
- Edward, R., & Holland, J. (2013). *What is qualitative interviewing?* University of Edinburgh, London; Bloomsbury Publishing. ISSN: 2048-6812.
- Eta, V.E.A., Atanga, M.B.S., Alatshili, J., & D'Cruz, G. (2011). Nurses and challenges faced as clinical educators: a survey of a group of nurses in Cameroon. *Pan African Medical Journal* 8:28.
- Evans, C., Razia, R., & Cook, E. (2013). Building nurse education capacity in India: insights from a faculty development programme in Andhra Pradesh. *BMC nursing*, 12(1), 8.
- Fakude, L. P., Le Roux, L., Daniels, F., & Scheepers, N. (2014). Reflections of nursing students, lecturers and clinical supervisors in the Western Cape on large classes: part 1: contemporary issues in nursing. *South African Journal of Higher Education*, 28(6), 1762-1775.

- Finkelman, A.W., & Kenner, C. (2012). *Professional Nursing Concepts: Competencies for Quality Leadership* (2nd ed.). United States: Jones & Bartlett learning.
- Gaberson, KB & Oerman, MH, 2010. *Clinical teaching strategies appraisal, synthesis and generation of evidence*. 6th Edition. Saunders: Elsevier.
- Gokalp, M. (2013). The effect of students' learning styles to their academic success. *Creative Education*, 4(10), 627.
- Hanafı, A. A. (2019). The Effect of Students' Learning Style on Their Writing Achievement. *Language-Edu*, 8(1).
- Henderson, A., Cooke, M., Creedy, D.K., & Walker, R. (2012). Nursing students' perceptions of learning in practice environments: A review. *Nurse education today*, 32,299-302.
- Hickey, M. (2010). Baccalaureate nursing graduate perceptions of their clinical instructional experiences and preparation for practice. *Journal of Professional Nursing*, 26 35-41.
- Holloway, I., & Wheeler, S. (2013). *Qualitative research in nursing & healthcare*. 3rd Edition. United Kingdom. Blackwell Publishing Ltd.
- Houghton, C.E., Casey, D., Shaw, D., & Murphy, K. (2012). Staff and students' perceptions and experiences of teaching and assessment in Clinical Skills Laboratories: interview findings from a multiple case study. *Nursing Education Today*, 32(6), 29-34.
- Hunter, K., & Cook, C. (2018). Role-modelling and the hidden curriculum: New graduate nurses' professional socialisation. *Journal of clinical nursing*, 27(15-16), 3157-3170.
- Jeggels, J., Traut, A., & Kwast, M. (2010). Revitalization of clinical skills training at the University of the Western Cape. *Curationis. Journal of the Democratic Nursing Organisation of South Africa* 33(2).
- Jolley, J. (2013). *Introducing research and evidence-based practice for nursing and healthcare professionals*. Routledge.
- Kaakinen, J., & Arwood, E., (2009). Systematic review of Nursing simulation literature for use of learning theory. *International journal of Nursing Education Scholarship*, 6(1) pp 16

- Kagafela, N.S. (2013). *Views of pre-graduate students regarding clinical accompaniment at Nursing Institution in Gauteng*. Unpublished master's dissertation. Pretoria: University of Pretoria.
- Kaphagawani, N. C., & Useh, U. (2013). Analysis of nursing students learning experiences in clinical practice: Literature review. *Studies on Ethno-Medicine*, 7(3), 181-185.
- Kapucu, S., & Bullet, H. (2011). Turkish nursing students' views of their clinical learning environment: A focus group study. *Pakistan Journal of Health Sciences*. 27(5) 1149-1153.
- Kurki, R. (2018). Stress Management among Nurses: Literature Review of Causes and Coping Strategies.
- Kolb, A.Y., & Kolb, D.A. (2005). Learning styles and Learning spaces: Enhancing Experiential Learning in Higher Education. *Academy of Management, Learning and Education*. 4(2) pp 1-3.
- Kolb, D.A., Boyatzis, R.E., & Mainemelis, C. (2000). *Experiential learning theory: Previous research and new directions*. Retrieved April 2012 from <http://www.experientiallearning.ucdavis.edu/tlbx-links.shtml>
- Kolb, D.A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Prentice-Hall. Engelwood Cliffs, N.J.
- Kolb, D.A. (2005). Learning styles and learning spaces: Enhancing Experiential learning in Higher Education. *Academy of Management learning and education*. 4(2) pp. 1-3.
- L'Ecuyer, K. M. (2019). Clinical education of nursing students with learning difficulties: An integrative review (part 1). *Nurse education in practice*, 34, 173-184.

Lekhuleni, E.M., Van der Wal, D.M., & Ehlers, V.J. (2014). Perceptions regarding the clinical accompaniment of student nurses in the Limpopo Province: research. *Health SA Gesondheid*, 9(3): 15-17.

Letswalo, L.O. & Peu, M.D. 2015. Perceptions of student nurses regarding accompaniment in the clinical environment in Gauteng Province, South Africa. *African Journal for Physical Health Education Recreation and Dance (AJPHERD)* Supplement 1:2):351-368.

LoBiondo-Wood, G., & Harper, J. (2010). *Nursing research methods and critical appraisal for evidence-based practice*. 7th edition. Mosby: Elsevier.

Maginnis, C., Croxon, L., & Croxon, C. (2010). Transfer of learning to the nursing clinical practice setting. *Rural and Remote Health*, 10(2), 1313-1320.

Magobe, N.B.D., Beukes, S., & Muller, A. (2010). Reasons for students' poor clinical competencies in the Primary Health care. Clinical nursing, diagnosis treatment and care programme. *Health SA Gesondheid*. 15(1):525-531.

Malone, W.J. (2009). *Clinical Supervision: We Are More Than Bosses. We Are Leaders*. West Chester Ohio [Online]. Available: <http://www.canville.net/Malone/home-study-course-200903.pdf> [2012, June17].

Mampunge, F. (2013). *Experiences of Final Year Nursing Students at a Public College of Nursing in the Eastern Cape Province regarding their Preparedness to Become Registered Nurses* (Doctoral dissertation, University of Fort Hare).

Mannix, J., Wilkes, L., & Daly, J. (2013). Attributes of clinical leadership in contemporary nursing: an integrative review. *Contemporary nurse*, 45(1), 10-21

- Morley, D. A. (2018). The 'ebb and flow' of student learning on placement. In *Enhancing Employability in Higher Education through Work Based Learning* (pp. 173-190). Palgrave Macmillan, Cham.
- Morgan, S. (2018). High fidelity simulation to improve multidisciplinary team working with pre-registrants. *Nursing Management*, 24(10).
- Morley, D. A. (Ed.). (2018). *Enhancing employability in higher education through work based learning*. Springer.
- McEnroe-Petitte, D.M. (2011). Impact of faculty caring on student retention and success. *Teaching and learning in Nursing*. 6(2):80-83.
- McNett, S. (2012). Teaching nursing psychomotor skills in a fundamentals laboratory: A literature review. *Nursing Education Perspectives*. 33(5), 328-333.
- Mellish, J.M., & Paton, F. (2010). *An introduction to the ethos of nursing: a text for basic student nurses*. 2nd edition. Sandton: Heinemann.
- Mntambo, S. N. (2009). *Student nurses' experience of clinical accompaniment in a public hospital in Gauteng Province* (Doctoral dissertation).
- Ab Manap, N., Kamaruddin, N. K., Mokhtar, Z. H. M., Parmalusami, K. V. P., Ismail, W. N. M. I. M., & Anthony, S. A. A. A. (2019). Student Nurses' Perceptions of the Clinical Learning Environment. *ILKKM Journal of Medical and Health Sciences*, 1(1), 15-19.
- Murad, M.H., Coto-Yglesias, F., Varkey, P., Prokop, L.J., & Murad, A.L. (2010). The effectiveness of self-directed learning in health professions education: a systematic review. *Medical education*, 44(11), 1057-1068.
- Naranjee, P. (2012). *Bridging programme graduates perceptions of their preparedness to manage a Nursing unit*. Unpublished Masters dissertation. Pretoria: University of South Africa.
- Odedra, K., & Hitchcock, J. (2012). Implementation of nursing grand rounds at large acute hospital trust. *British Journal of Nursing* 21(3) 182-185.

- Papastavrou, E., Lambrinou, E., Tsangari, H., Saarikoski, M., & Leino-Kilpi, H. (2010). Student nurses' experiences of learning in the clinical environment. *Nurse Education Practice*, 10,176-182.
- Patton, M. Q. (2010). *Developmental evaluation: Applying complexity concepts to enhance innovation and use*. Guilford Press.
- Phillips, K.F., Mathew, L., Aktan, N., & Catano, B. (2017). Clinical education and student satisfaction: An integrative literature review. *International Journal of Nursing Sciences*, 4(2), 205–213.
<https://doi.org/10.1016/j.ijnss.2017.03.004>
- Polit, D. F., & Beck, C. T. (2012a). *Essentials of nursing research: Appraising evidence for nursing practice*. Lippincott Williams & Wilkins. Cape Province. Master Degree of Nursing Science. Stellenbosch University.
- Polit, D.F., & Beck, C.T. (2012b) *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. (8th Edition) USA: Lippencot Williams & Wilkins, A. Wolters Kluwer Business.
- Rafiee, G., Moattari, M., Nikbakht, A.N., Kojuri, J. & Mousavinasab, M. (2014). Problems and challenges of nursing students' clinical evaluation: a qualitative study. *Iranian Journal of Nursing and Midwifery Research* 19(14): 41-49.
- Ramani, S., & Leinster, S. (2008). AMEE guide no. 34: Teaching in the clinical environment. *Medical Teacher*, 30(4), 347–364. <https://doi.org/10.1080/01421590802061613>
- Rebar, C., Gersch, C., Macnee, C., & Mc Cabe, S. (2010). *Understanding Nursing Research: Reading and Using Research in Practice*. Lippincot, Williams & Wilkins.
- Ricketts, B. (2011). The role of simulation for learning within pre-registration nursing education—a literature review. *Nurse Education Today*, 31(7), 650-654.

- Salifu, D. A. (2016). *Theory-practice gap: Perceptions of Nurse Faculty and Nursing students in University for Development Studies and Clinicians in Tamale Teaching Hospital* (Doctoral dissertation, University of Cape Coast).
- Salifu, D. A., Gross, J., Salifu, M. A., & Ninnoni, J. P. (2019). Experiences and perceptions of the theory-practice gap in nursing in a resource-constrained setting: A qualitative description study. *Nursing open*, 6(1), 72-83.
- Scully, N.J. (2011). The theory practice gap and skills acquisition: An issue for nursing education. *Collegian*, 18, 93-98.
- Senti, N.I., & Seiko, E. (2014). Psycho-social constraints affecting clinical skills of nursing students at Lilitha College of Nursing, East London. *South Africa. African Journal for Physical Health Education, Recreation and Dance (AJPHERD)* (supplement 3): 79-88.
- Shepherd, I., & Burton, T. (2019). A conceptual framework for simulation in healthcare education—The need. *Nurse education today*, 76, 21-25.
- Sinclair, J.M. (2013). *New Zealand Nursing students' experiences of ethical issues in clinical practice: a descriptive study*. Unpublished Master's thesis. Taradale, New Zealand: Eastern Institute of Technology.
- South African Qualifications Authority (2008) Act 67 of 2008.
- South African Nursing Council (SANC) Nursing Act, (1978). *Act No. 50 of 1978 (as amended)*. Pretoria: Government Printer.
- South African Nursing Council (SANC). (2005). *Regulation relating to the approval of and the minimum requirements for education and training of a nurse (General Psychiatric and*

Community) and Midwifery R.425 leading to registration in terms of section 45(1) of the Nursing Act 50 of 1985 (as amended). Pretoria: Government Printer.

South African Nursing Council (SANC), (2006). *Regulations regarding registers for students. Regulations R.3735, in terms of section 11(1) of the Nursing Act, 69 of 1957. Pretoria: Government Printer.*

South African Nursing Council (SANC). (2013a). *Nursing education and training standards, under the provision of the Nursing Act, 2005. Pretoria: Government Printer.*

South African Nursing Council (SANC). (2013b). *The national strategic plan for nurse education, training and practice. Pretoria: Government Printer.*

South African Nursing Council (SANC). (2013c). *Regulations relating to the accreditation of institutions as nursing education institutions. Regulation R.173, in terms of section 58(1) (g) of the Nursing Act, 2005. Pretoria: Government Printer.*

Strand, I., Nåden, D., & Slettebø, Å. (2015). Students Learning in a Skills Laboratory. *Nordic Journal of Nursing Research*, 29(3), 18–22. <https://doi.org/10.1177/010740830902900305>

Sweifach, J. S. (2019). A look behind the curtain at social work supervision in interprofessional practice settings: critical themes and pressing practical challenges. *European Journal of Social Work*, 22(1), 59-68.

Teixeira, A. A. (2016). The impact of class absenteeism on undergraduates' academic performance: evidence from an elite Economics school in Portugal. *Innovations in Education and Teaching International*, 53(2), 230-242.

- Traut, A. (2013). *Laboratory Clinical Nursing Course Guide*. University of the Western Cape: University of the Western Cape Publishers.
- Van Graan, A. C., & Williams, M. J. S. (2017). A conceptual framework to facilitate clinical judgement in nursing: A methodological perspective. *Health SA Gesondheid*, 22.
<https://doi.org/10.1016/j.hsag.2017.01.004>
- van Vuuren, V. J., Goon, D. T., & Seekoe, E. (2018). The perceptions of nurse educators regarding the use of high fidelity simulation in nursing education. *Africa Journal of Nursing and Midwifery*, 20(1), 1-20.
- Waldock, J. (2010). Facilitating student learning in clinical practice. *Nursing New Zealand (Wellington, NZ: 1995)*, 16(1), 14-6.
- Williams, S. G., & Bihan, S. (2013). Application of an innovative, autonomous, creative teaching modality through service-learning in a community-health nursing course. *Journal of Nursing Education and Practice*, 3(5), 116.
- Wighus, M., & Bjørk, I. T. (2018). An educational intervention to enhance clinical skills learning: Experiences of nursing students and teachers. *Nurse education in practice*, 29, 143-149.
- Wittayapun, Y., Tanasirirug, V., Butsripoom, B., & Ekpanyaskul, C. (2013). Factors affecting health promoting behaviours in nursing students of the Faculty of Nursing, Srinakharinwirot University, Thailand. *Journal of Public Health*, 40, 215-225.



APPENDIX 1: INTERVIEW GUIDE

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2443 Fax: 27 21-959 2271

E-mail: zheradien@uwc.ac.za

Title: Clinical Supervisors’ perceptions regarding the factors that promote or inhibit nursing student’s skills transfer from the skills laboratory to the clinical practice environment

QUESTIONS	PROBES
1.What are the factors related to the clinical teaching approach that promote nursing student’s skills transfer from the skills laboratory to the clinical practice environment?	Tell me more Elaborate Explain Give examples
2. What are the factors related to the clinical teaching approach that inhibit nursing student’s skills transfer from the skills laboratory to the clinical practice environment?	Tell me more Elaborate Explain Give examples
3.What are the specific challenges with regard to the teaching and learning process that inhibit transfer of skills from the laboratory to the clinical practice environment?	Please elaborate? Challenging, inconsistent?

APPENDIX 2: INFORMATION SHEET



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2443 Fax: 27 21-959 2271

E-mail: zheradien@uwc.ac.za

INFORMATION SHEET

Project Title: *Clinical Supervisors' perceptions regarding the factors that promote or inhibit nursing student's skills transfer from the skills laboratory to the clinical practice environment.*

What is this study about?

This is a research project being conducted by Zenobia Heradien at the University of the Western Cape.

I am currently registered for a Master programme in nursing research at the University of the Western Cape, and I am doing my research under the supervision of Professor F. Daniels. I am inviting all clinical supervisors supervising foundation year 1 and 2 and the 1st, 2nd, 3rd and 4th year of the mainstream Bachelor of Nursing programme at the University of the Western Cape, to participate in the research study, as specified above. The purpose of the study is to explore the perceptions of clinical supervisors regarding factors related to the clinical teaching approach that promote or inhibit students' skills transfer from the skills laboratory to the clinical practice environment

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

You will be asked to participate in a semi-structure interview with a researcher. The interview will be conducted between the researcher and the research participant. An interview guide with open-ended questions will be used and interviews will last 45 minutes up to an hour. The interview will take place in the boardroom at the School of Nursing to ensure privacy at a time which will be most convenient to the research participant. Three structured open-ended questions will be asked in which the clinical supervisors will describe factors that inhibit nursing student's transfer of skills from the skills laboratory to the practical environment.

Would my participation in this study be kept confidential?

The researchers undertake to protect your identity and the nature of your contribution. To ensure your anonymity, all personal information will be kept confidential to the researcher only. All the personal information and responses will be kept in a secure place which will only be available to the researcher. The audio recordings will be labelled with a code instead of name and only the researcher will be able to link the code to identify the research participant. The researcher will be able to link the data from the semi-structured interview by the use of identification keys and only the researcher will have access to the identification keys. All data will be kept in the researcher office in a lock draw and only the researcher will have the key to the draw.

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

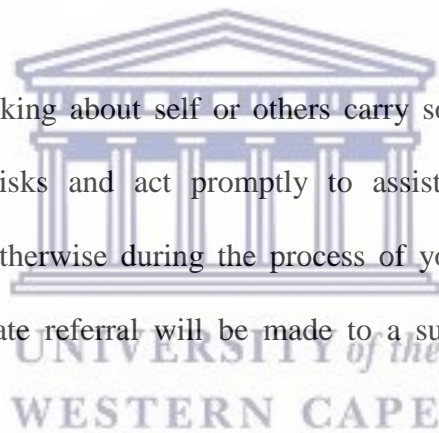
child abuse or neglect or potential harm to you or others. In this event, we will inform you that we have to break confidentiality to fulfil our legal responsibility to report to the designated authorities.

What are the risks of this research?

There are no known risks associated in the participation of the research project.

However, the purpose of the study is to explore the perceptions of clinical supervisors regarding factors related to the clinical teaching approach that promote or inhibit students' skills transfer from the skills laboratory to the clinical practice environment.

All human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.



What are the benefits of this research?

The benefits to you include from this study could possibly improve the clinical nursing programme.

This research is not designed to help you personally, but the results may help the investigator learn more about transferring of nursing students' skills from the skills laboratory to the clinical practise environment. We hope that in the future, other people might benefit from this study;

through improved understanding of the importance of the transferring of the nursing students' skills in the clinical practise environment.

Describe the anticipated benefits to science or society expected from the research, if any.

Do I have to be in this research and may I stop participating at any time?

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.

What if I have questions?

This research is being conducted by Zenobia Heradien at the School of Nursing at the University of the Western Cape. If you have any questions about the research study itself, please contact Zenobia Heradien at:



39 The Palm, Sienna Drive

Burgundy Estate 7441

Cell number: 0834544314

Email: zheradien@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:

Insert information here in the same format as the Dean's information

Professor J. Chipps

Head of Department

University of the Western Cape

Private Bag X17

Bellville 7535

jchipps@uwc.ac.za

Professor A. Rhoda

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: HS17/10/21)

APPENDIX 3: CONSENT FORM

UNIVERSITY OF THE WESTERN CAPE



Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2443 Fax: 27 21-959 2271

E-mail: zheradien@uwc.ac.za

Title of Research Project: *Clinical Supervisors' perceptions regarding the factors that promote or inhibit nursing students' skills transfer from the skills laboratory to the clinical practice environment.*



The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

Participant's name:

Participant's signature

Date: 03 October 2017

APPENDIX 4: ETHICS CLEARANCE



OFFICE OF THE DIRECTOR: RESEARCH RESEARCH AND INNOVATION DIVISION

Private Bag X17, Bellville 7535
South Africa
T: +27 21 959 2988/2948
F: +27 21 959 3170
E: research-ethics@uwc.ac.za
www.uwc.ac.za

27 November 2017

Ms Z Heradien
School of Nursing
Faculty of Community and Health Sciences

Ethics Reference Number: HS17/10/21

Project Title: Clinical supervisors' perceptions regarding the factors that promote or inhibit nursing students' skills transfer from the skills laboratory to the clinical practice environment.

Approval Period: 19 November 2017 – 17 November 2018

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.

A handwritten signature in black ink, appearing to read 'Patricia Jostias'.

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

PROVISIONAL REC NUMBER - 130416-049

APPENDIX 5: EDITORS EDITING LETTER



LETTER OF CERTIFICATION

Gareth O P H Lowe
9 Lamborghini Avenue
Wierda Park
Centurion
0157
Tel: +27 83 726 6868
Email: gareth_lowe@yahoo.com
4 May

To whom it may concern

I hereby certify that I, Gareth Owain Paul Howel Lowe, edited the thesis of **Zenobia Heradien**, entitled “**Clinical supervisors’ perceptions regarding the factors that promote or inhibit nursing students’ skills transfer from the skills laboratory to the clinical practice environment**”, for language.

Regards

Gareth Lowe

Editor

APPENDIX 6: EXAMPLE OF TRANSCRIBED INTERVIEW 2

Recording 2

29:18

I Good morning.

P Good morning.

I I just want to thank you very much for taking part in my studies. You've read through the interview consent form?

P Yes.

I Also the information sheet.

P Yes.

I And also the information sheet. Are you happy with it?

P Yes.

I Thank you very much for participating. I just want to know if you know perhaps what do we mean with teaching and learning in our profession?

P Yes.

I Can you just explain to me what the teaching...?

P (laughs) Teaching and learning, I'll try and put it simple. It is the transferring of information from point A to point B. There's this person that is going to teach, trying to simplify it across to this person that needs to receive, being the student and then it will depend on the level that they're at because the more junior they are you need to be as simple as you can. The more advance they are then the kind of information that goes to them needs to be at their level.

I Okay, so you have quite good understanding. May I ask how long are you in this profession as a clinical supervisor?

P I started in April; that makes me six months.

I So you're quite on par with the teaching and learning and what kind of teaching methods the university uses?

P Yes, I've come to understand and got some exposure on a lot of things, yes.

I That's good. What are the factors related to the clinical teaching approach that will promote nursing students' skills transfer from the skills lab to the clinical practice environment? Can you just tell me more about it? Your understanding of it.

P From what I've observed, I would say, I want to find the right English words, hey (laughs)...

I No, you can just say what comes to mind. You can just explain to me plain and simple.

P Factors related to clinical teaching approach that promote nursing students' skills transfer, to see, practically see what has been done, why it's been done, how it's been done, when should it be done. Because for me it helps the students, it helps their thinking; their understanding, yes I would say that. And then also they have this theoretical part of their education and then when it comes to practical, they need to do that transferring also. So what they see makes sense more rather than what they hear.

I So do you think that the factors, do you think it has an impact on the students, on their learning and their understanding?

P The clinical teaching approach?

I Yes, do you think if it is not done ...?

P properly...

I Properly.

P Yes, it does. Yes, it does. I will think so because for me, we're preparing them to be professional beings and we expect them, at some stage, to stand on their own to make a decision and to think beyond what they have been taught. So the way how they are taught I think it does have an effect on the factors related to the clinical teaching and how it is transferred.

I Do you think that also experience counts?

P Very much. Very much. Because from your experience you are able to see what you know, how much of it you know and what you can improve on. So yes, experience it counts quite a lot.

I So what do you think are the factors related to, this is now the second question I am just asking you - related to the clinical teaching approach that inhibit the nursing students' skills transfer from skills lab to the clinical practice environment?

P Let me make an example.

I Please give me examples.

P Myself as a supervisor, if I don't know what I'm teaching; if I don't have the correct information well, of course, the student might not know that I don't have the correct information, however, it is bound to catch up because what I transfer to students it is exactly what they are going to do. If I am not updated with the information and the skills that the students need to learn, especially how it needs to be done things change, we improve, instruments change and you know we're moving to a simpler way of doing things and if I'm not familiar with those things it definitely is going to inhibit the transfer of information to the student.

I Do you think that there's a lot of change happening nowadays?

P I think so, yes, I think so. Well, in our profession there is change but it is slowly, slowly but yes, there's a lot of change happening.

I And do you think there's a lot of, especially, in your clinical profession, clinical teaching profession as supervisors, do you think that you guys are open to change?

P Honestly speaking, we are resistant to change. (laughs) We are resistant to change. In the nursing profession, let me talk about the nursing profession because I've been here for some time, we seemed to be resistant to change. I think it is fear. I think so. It is fear maybe of the unknown, I don't know. Or maybe lack of information would make me fear to change and then I would have all sorts of excuses wanting to hold on to what I have known for years. You would find professional people telling you I've been here for so many years. They're doing things in an old manner. We improve. We grow. We change. Yes, it is still the same procedures that are done but it becomes much more simpler and the manner in which they need to be done it gets simplified as the years go. But when it comes to this profession it is a struggle to change. It seriously is a struggle to change.

I And does that count for the nurses in the hospital as well or are you just explaining about the supervisors? Are you just referring to them alone or do you include that as an overall, the nursing profession – the nurses in the clinical learning environment as well?

P I would say in the clinical learning environment because at the end of the day this resistance to change affects everybody inclusive of the clinical supervisor, one, inclusive of the student. Because remember, as a clinical supervisor, I need to be up to date with what is happening, the new things that are coming. I need to upgrade the kind of

information I have. Now I get to the facility and they're still on the old regime of doing things. There's these students that are with them more than I am. They spend the whole day with them. What are the students learning? Somewhere somehow this resistance to change it does have an impact because myself as a supervisor I would come and teach such but they will not see it in the ward because it is done in the old way. So it does. It does affect.

I And how do you think how does the student responds? Can you just explain more about how does the student, yo you think it is easier for the them?

P It is very difficult. They are caught in the middle, let me say, they get themselves caught in the middle because here's a supervisor teaching this and they are in the ward, the professional people, the senior people in the ward are doing the total opposite or now the student finds him or herself do I do this or do I do that? Remember there will be a stage where I need to assess and when there's going to be an assessment I am expecting the student to demonstrate what was demonstrated to him or her. Now if they're going to get a different demonstration and be expected to practice differently it will impact. It will have a negative impact on the student.

I So you have explained now some of the challenges. So what are the specific challenges with regard to teaching and the learning process that will inhibit the transfer of skills from the laboratory skills to the practical environment? What do you think what will the challenges be?

P The challenge will be...

I In the skills lab, as well as in the clinical practice environment. Why do you think that there are some challenges and what are the challenges, if you can explain to me a little bit about it and elaborate on it please.

P Let me try to say this, and you will tell me if I'm not responding accordingly. In the clinical practice environment, the challenge there will be there is this student, I teach this student, I move onto the next student. When I return to the student, either they get to practice what is being taught in the correct manner or they don't get to practice it at all. That is a big challenge. The student never gets to enhance and kind of like polish the skill. Because practicing it will allow the student, as well to come back to me and say,

Ma'am, I don't understand this. Ma'am, I think I'm struggling there. But now you teach and you walk away and then nothing ever happens after that.

I Now why do you think they don't practice?

P Because they don't get a chance to practice. If they do practice it will be okay, let me say you are lucky if they get to practice even if it is the wrong way that they are practising, which I will honestly prefer rather than for them not to practice at all. The thing now is that it gets difficult to undo the wrong procedure wthat is embedded on the student because remember they are there. They spent most of the time with the nurses in the ward. So they are more exposed to the wrong way of doing things rather than they are exposed in the right way. I spend a certain amount of time with the student; hat is too little for me to reel that into them.

I What is too little? What amount of time do you have?

P I would say depending on the number of students that I have on that day, and the procedure that I need to do, the very first time I really like to spend an hour, that is how I like to do it, spend an hour with the student explaining and guiding the student before we even get to a guided practice. Well, a guided practice is another, what would I say, another encounter that still helps because we're still communicating with the student rather than an assessment, because an assessment, that's why I need to see is it understood or is not understood? How is it understood? But with a guided practice I am still guiding. You see? The student needs to go and do what was taught. Then come back, do and then it is still a guidance. Ja, it is kind of a challenge.

I How many students do you have per term or per day?

P Oh, dear. Per day, let me say, let me look at the first years.

I What year level do you supervise?

P I've got foundation 1, foundation 2, B. Nur1 and B. Nur 2. Well, the foundation 1 and the foundation 2, there's not a lot of them....

I But it is not on the same day.

P No, it is not on the same day. They're different days. The foundations are Thursdays and Fridays and the B. Nur 2, hey're Tuesday and Wednesday and B. Nur 1 is Monday, Thursday and Friday.

I Would you say that these challenges, that it is all over year levels. I mean you've mentioned now that you are involved with foundation 1, foundation 2, B. Nur. 1 and B. Nur 2. Is this the challenge or is this a specific year level that you are referring to?

P It is not a specific year level. This is a challenge right through. It is a challenge in all the year levels because the difference in how these students are taught makes a huge impact. The supervisors teach and then when they get into the ward they hardly ever get to see what the supervisors teach them because it is done differently in the ward.

I Okay, is that the only challenge or is that the only thing... what do you think what other challenges bring about that the students don't have enough time or time to practice at all?

P They don't have enough time to practice. I feel that they are not exposed enough to the facility to give them a chance to practice.

I What do you mean by enough?

P Let me make an example, with the first years, it is not that bad with the second years because they are there two times in a week, but with the first years, some of them are there one day, I mean one day. One day and one day. That is not enough. Yes, I do know to come to do self-directed learning but them being exposed at the facility just once a week is not enough. Remember nursing is more practical. So they don't get much of that. They get taught something today and they will only get to see it again the following week. They forget. They lose the skill. So for them it becomes an ongoing guided practice when it needs not be because they are forgetting.

I So you think it is also the clinical placement.

P Yes.

I According to you...

P According to me, for the first years, this I'm noticing with the first years especially.

I So that only the first years. But you say the second years you are fine with?

P The second years I am fine because they are there two times a week. They get placed, some of them come in on a Monday and then on a Wednesday. So two times a week... And remember as well the second years, they are not so new but the first years, they are new. They're still like babies in the profession. They still need a lot of guidance in the profession. They still need just a little bit of extra exposure.

I Do you think also that the guidance is sufficient at all? What do you think? Can you just tell me a little bit about that and elaborate on the guidance that the students get from the clinical staff as well?

P The clinical staff in the hospital?

I Yes. You can explain to me actually both, from supervisors, as well in the hospitals but what do you observe?

P Well, from the supervisor's point of view, I will not lie, I cannot speak for the others because we are different and I really would not know how each supervisor does what because that time as well it matters. That guidance from the supervisor as well matters. But then again when it comes to time factor looking at how many students I need to see per day now some, depending, as well the amount of time that I have for this specific procedure. Either it allows me to spend more time with the student or to spend, you do get those students who catch up fast. You get those students, really, you would see I need to come back and do this again. I need to come back and then maybe after a certain number of guidance then the student will start grasping so depending on that as well, I would say, I would tackle that question like it depends on the supervisor and the student who they come across at that moment and then you'll be able to see here, I'm spending two hours, here I'm spending an hour. Mind you, if I'm going to spend two hours it means that there's a student that I might not get today because there's such a lot of time that I've spent with the one student.

I And when you refer to the clinical environment?

P The clinical environment, well, they spend a lot of time there. They spend a lot of time there but...run your question by me again.

I I was asking you about support, you know, you were saying sufficient...

P Oh, they spend a lot of time there but support-wise I would say they have minimal support. I would say that. ...

I Why do you say that?

P Because I think the nursing staff tend to forget that they are students and they need to learn. They kind of like take them as part of the working force and they kind of like overlook that they need to be taught, they need to be mentored. As much as they spend 12

- hours in the facility but when it comes to guidance there is very minimal guidance that the students get.
- I So that is quite a few challenges that you brought up now. Well, I think then we're about... is there anything else that you can think of? We've covered now the factors, and also the different challenges, and I think you've mentioned now quite a few from foundation year level until to the second year, B. Nur 2. So you say overall you experience all these challenges and all these factors that you've just mentioned to me; they are linked.
- P It is common throughout the year levels. Well, that is what I've observed since I came here. And the crux of the matter for all of this challenge, for me, it boils down to just one thing – resistance to change. Because if we were to accept or embrace change, trust me, things would be much more easier, especially in a facility that is a teaching facility. You need to be up with the programme, you need to be up with what is going on – it is a teaching facility so we need to know okay, now there's an upgrade, now there's a change of doing things in such and such things. But now if we are not at the same level it creates a problem. It creates a problem for me as a supervisor. It creates a problem for the student as much as for those that are in the ward who gets to be left with the student for a lengthy period of time.
- I And if we have to come back to the skills lab, okay, so most of your training is happening in the skills lab environment, do you think that the setup of the environment is that sufficient for learning?
- P Well, the setup of the environment, well, it is a small space. Sufficient for learning?
- I Are they on par with things that is happening in real life in the clinical learning environment? Is there a correlation between that?
- P Yes, there is. Yes. Yes, they are empowered with what is happening in real-life situations. Ja, I would say yes. However...
- I However, yes?
- P (laughs)
- I Okay, however, just explain or tell me. You can elaborate whatever you want to say.
- P I think there is an inhibition that happens there in the skills lab in a manner that, you know, we get there in the afternoon. They are tired. The concentration ...

I Who is tired now?

P The students are tired. The concentration is not there. Now this inhibits the information that gets transferred from the supervisor to the student. They're not interested and this is the one thing that inhibits the transfer of information. They are there for the sake of a signature and a signature only.

I What is the signature all about?

P The signature is, they need to have a certain amount of hours. So the skills lab is part of that so we sign their books – the student was here. And most of them only present themselves because of that. They are not interested...you know at the skills lab that's where they get a chance to practice. They first get a demonstration of this new procedure that they are learning about and then they get a chance to practice. They are very, very much unwilling to practice. They are not interested. The sooner they can get out of the skills lab the better for them, and that is an inhibition from the supervisor's point of view because I'm there teaching, transferring this information and you can see there is very little that they are grasping, if they are grasping at all. The only time when they would grasp something is when they know it is for an exam. Other than that, no, but I think it's got to do with the time when they get to the skills lab which is in the afternoon and they are tired.

I Is it most of them do you think? Or is it overall, their attendance level – how is their attendance level in the afternoons?

P They do come. They do come. They're attendance is I would say it is good. It is not most of them. It is not all of them. But I would say no-one is outdoing the other one. There are those who concentrate yes and there are those that you can see it is just a matter of... but most of them you can see they are drained, they are tired when they come in. Even those who are concentrating you can see that they are drained and they are tired. Hence they end up not wanting to even practice.

I What time is the skills lab? What is the time?

P Two o' clock in the afternoon.

I Till?

P Until four.

I Till four?

- P Yes.
- I It is quite a long time.
- P It is quite a long time.
- I And you think that is mostly because due to the time factor because it is so late in the afternoon that they...?
- P Yes. And remember they are also rushing to get home, transport and all that. So for them, the only thing that's there just sign the book, sign the book and then they leave. This I say it comes out after the skills lab we get to the facility, you get to the student and then you realise the student was there but they do not have an understanding of this procedure that was demonstrated at the skills lab. Because a couple of them you meet them at the facility let's get ready for a guided practice – the student is not ready. Yet, they had a demonstration. And that inhibits the transfer of information.
- I And the teaching method that you guys are using at the skills lab, do you have your own or are there certain plans that you put, you know, supervisors together to transfer this knowledge or do you come up with your own? Each one has its own unique teaching style or do you all decide on one?
- P We all decide on, okay, let me make an example, say we're going to be teaching the removal of sutures, we all decide this is how it's done. But I would think each and every single supervisor is different on how they're going to do it. But what we try to do is to maintain consistency in saying that at the end of the day, the procedure should be done in the same manner. Now how the other supervisors ensure that it gets done in that manner I don't know but what we try to do is it needs to be the same information that is transferred to the student. How an individual does it I don't know.
- I So I just want to thank you very, very much. I think we've come to the end of the interview session so I just want to thank you very, very much for agreeing to participate in my studies.
- P Did I talk sense? (laughs)
- I Yes, very much. You've answered the questions that I have posed to you and I am very, very satisfied. So I just want to thank you very, very much for participating and if there's nothing else, well...?
- P Except good luck with your studies.

I Thank you very much. Thank you.

---End of audio---



UNIVERSITY *of the*
WESTERN CAPE