

UNIVERSITY OF THE WESTERN CAPE

First year learner nurses' perceptions on self-directed learning during clinical activities in the
skills laboratory

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A mini-thesis submitted in partial fulfilment of the requirements for degree of Magister
Curationis in Nursing Education at the School of Nursing, University of the Western Cape

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November 2013

DECLARATION

I Sipiwe Muzizi Mulube, declare that **“First year learner nurses’ perceptions on self-directed learning during clinical activities in the skills laboratory”** is my own work. I have fully acknowledged all references used or quoted in this study.

.....

Signature (Sipiwe Muzizi Mulube)

.....

Date

ACKNOWLEDGEMENTS

I would like to express my sincere and deepest gratitude to:

- My God, indeed “You know everything I do; from far away you understand all my thoughts. You see me, whether I am working or resting; you know all my actions. Your knowledge of me is too deep; it is beyond my understanding...” Psalms 139.
- Professor K. Jooste for her guidance, support, and knowledge, since she assisted me during this research journey when I had moments of uncertainty, confusion, and discomfort. I emerged stronger as a leader.
- Special appreciation to my dear husband, Clayton, and the family. You were my pillar and the source of strength when I felt drained during this journey. Lynn, Godfrey, and Thabani thanks for your patience, sacrifice and prayers. You played an important part of this great achievement.
- To my beloved parents and siblings, you are my best role models ever in resilience. I am blessed to have you in my life.
- To Mr Mbangweta and the family, thank you for constantly keeping me in your prayers.
- My colleagues Sharon, Roselynd, and Tsitsi thank you for your psychological support and guidance.
- I owe my deepest gratitude to Mr Katalayi, Mr Meki, and Mr Mtengerenji for their statistical and writing support.
- My heartfelt appreciation goes to all the nursing students who participated in this research study and all the academic staff for their support and encouragement.

DEDICATION

This mini-thesis is a special dedication to my late mother, Idah Maduma Mzizi, and my elder sister, Thandekile. You taught me to be determined and you instilled the spirit of self-confidence and resilience in pursuing my dreams. I know you would have been proud of this accomplishment but our plans will never be God's plans. You will remain my greatest heroes.

KEYWORDS

Self-directed learning

Independent practice

Learner nurse

Perceptions

Skills laboratory

Clinical activities

Andragogy

ABSTRACT

Self-directed learning (SDL) has become a focus in the past years due to the increase in the complexity and changes in the nursing profession development. Employing SDL methodologies has been advantageous to the learner nurses, since these methodologies are associated with moderate improvement in the knowledge and effective improvement in the affective and psychomotor domains. Despite the efforts to expose students to SDL, the challenge remains the lack of students' commitment to SDL during clinical activities in the skills laboratory. This lack of commitment may result from students' perceptions of SDL. Therefore, this study seeks to explore and describe the perceptions of first year learner nurses about self-directed learning activities in a skills laboratory at a school of nursing in the Western Cape.

An exploratory descriptive quantitative design was used to answer the research question. All the first year learner nurses (N=336) pursuing a 4-year Bachelor Nursing Degree served as the target population and a sample of 168 respondents was selected by simple random sampling. A self-administered 5-point Likert scale questionnaire with an additional four open-ended questions was used to collect data for the study. Data was analysed by using the Statistical Package for the Social Sciences (SPSS) Version 21 software. Descriptive statistics were used to present frequencies, mean values, standard deviations, and the results were illustrated by means of tables. The Spearman correlation coefficient indicated the correlations between the 4 domains.

The findings revealed that most of the respondents positively perceived self-directed learning in the skills laboratory. However, it was also found that learners had challenges in relation to time management during the implementation of self-directed learning.

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DEFINITION OF TERMS

Learner nurse: The Nursing Act, 2005 (Act 33 of 2005) defines a learner nurse as a person undergoing education or training in nursing who has been registered with the Nursing Council (McQuoid-Mason & Dada, 2011, p. 168). In this study, this term will be synonymously used with student nurse.

Self-directed learning is a process when individuals take the initiative with or without the help of other people to diagnose their learning needs by formulating learning objectives, identifying human material resources for learning choose, implementing appropriate learning strategies, and evaluating learning outcomes (Knowles, 1975, p.18).

In the context of the proposed study, SDL is the process when learner nurses are motivated to learn, self-monitoring their learning process, planning and implementing strategies to meet their goals, as well as using interpersonal communication skills to seek help with the aim of meeting their learning goals during the clinical activities in the skills laboratory with or without the help from other people.

Perception is how a person, such as a learner nurse, thinks and feels about a given phenomenon, such as SDL.

Andragogy is defined as the art and science of helping adults to learn (Knowles, 1980)

Independent practice is the act of practising clinical nursing skills based on the learner's decision and at their own time in a skills laboratory.

Skills laboratory is a dedicated instructional setting with a variety of models and simulators that are used for teaching and learning of clinical nursing skills and learners have an opportunity to practise the skills independently.

Clinical activities: These activities include various events that are carried out in a skills laboratory for the purpose of learning and practising clinical nursing skills

CHAPTER ONE

OVERVIEW

1.1 INTRODUCTION

Since the patients' safety issues and avoidance of bedside teaching have increasingly placed heavy pressure on the decreasing autonomy of trainees in the clinical context, self-guided learning opportunities for trainers in the non-clinical context are becoming more important (Kennedy, Lingard, Baker, Kitchen & Regehr, 2007, p.1084). The introduction of training paradigms that utilise simulation and independent practice are viable in the health profession and further allow learners to initially practise on models rather than patients; hence assisting to enhance patients' comfort and safety (Brydges, Carnahan, Safir & Dubrowski, 2009,p.507).In line with the previous statement, the move from traditional skills training of bedside teaching to innovative skills development methods has been implemented at a School of Nursing in the Western Cape while considering its context, teaching, and learning strategies and philosophy.

The effective use of a clinical skills laboratory, particularly the SDL component by the learners, ensures yielding competent graduates who are able to deliver satisfactory care to the health consumers while being lifelong learners. Wellard, Woolf and Gleeson (2007) suggest that innovative ways of teaching in a self-directed learning clinical skills laboratory be promoted, with the teacher playing a facilitator role and the student taking an active role in identifying the learning needs and relevant resources, as well as engaging in the process of learning.

Self-directed learning (SDL) has recently become a focus due to the increased complexity and developmental changes in the nursing profession (Safavi, Shooshtari, Mahmoodi & Yarmohammadian, 2010, p.27). According to Knowles (1975, p. 18), SDL has been described as the process when learner students initiate, with or without the assistance of other people, the recognition of their learning needs, formulation of their learning goals, identification of the human and material resources for learning, choice and implementation of appropriate learning strategies, and the evaluation of learning outcomes.

Learners are expected to identify the actual and potential needs of clients, act in a professional and ethical manner when faced with complex situations, and demonstrate professional knowledge, as well as psychomotor and affective skills (Safavi *et al.*, 2010, p.27). Bastable (2008) further asserts that in this constantly changing environment, SDL is important for enabling learner students to develop independent learning skills, and a sense of responsibility and assertiveness that are essential qualities for the nurses' career. The suggested expectations can only be achieved once students become self-directed learners.

An educational programme that utilises SDL methodologies has been described in various health professions; such as medicine, nursing, and non-medical disciplines such as information systems (Goede, 2012, p.1059). Employing SDL methodologies has been advantageous to the learners. The systematic review of Murad, Coto-Yglesias, Varkey, Prokop and Murad (2010, p.1057) reveals that SDL is associated with moderate improvement in knowledge. They also suggest that it could be effective in improving the affective and psychomotor domains. In the same vein, Brydges *et al.* (2009, p.507) illustrate that SDL clinical technical skills increase greater skills retention.

Despite the advantages that SDL has on the learners' learning process, some learners experience anxiety when using SDL as a teaching and learning strategy and some students with low SDL readiness become more anxious when they are involved in independent projects or case studies (Li, An & Li, 2010, p.1205). The researchers postulate that the positive perception of SDL would increase the self-directed learning activities at a skills laboratory.

The term SDL has been used widely in the literature to describe various concepts in learning; such as self-planned learning, learning projects, self-education, self-teaching, autonomous learning, independent study, and open learning. The challenge of conducting a systematic review finds an explicit definition of SDL in the literature problematic (Murad *et al.*, 2010, p.1057). However, according to Murad *et al.* (2010), SDL is defined as a process when individuals initiate, with or without the help of other people, the recognition of their learning needs, formulation of learning objectives, identification of human material resources for learning, choice and implementation of appropriate learning strategies, and the evaluation of learning outcomes (Knowles, 1975, p.18). Despite several studies that reveal continued and elusive definitions, nature, purpose, and worthiness of SDL by the students and educators (Pryce-Miller online , 2010, p.21; Hewitt-Taylor, 2002, p.496), the concept is widely used in nursing education.

However, the key components of SDL are: The educators as facilitator, identification of learning needs, development of learning objectives, identification of appropriate resources, implementation of the process, commitment to a learning contract, and evaluation of learning (Murad & Varkey, 2008, p. 580). Therefore, SDL is not merely an expectation that students will study, read, or perform learning task but practical solutions that realistically support the students towards independent learning (Timmins, 2008, p.302). Due to this reason, it has been

suggested that time and investment are required in this activity to realise aspirations and to reduce the burden placed on the students when expectations are placed too high (Timmins 2008, p.302). Some levels of facilitation are needed, for example teaching SDL skills and how these skills can identify learning needs.

Finkelma and Kenner (2012, p. 133) emphasise that SDL is important for all students nurses, since it leads to the greater ability to achieve professional lifelong learning. Being a lifelong learner would assist the individuals with coping with constantly changing technology and health challenges. It is, therefore, important to understand that SDL is important for nurse educators and students alike (Li, Deng & Chen, 2009, p.737).

Several studies have established that SDL is viewed as a powerful motivator for learning and increases participation in classrooms; learners learn how to learn, and are empowered to reflect on their learning process (ChingMok, 2012, p.403). The systematic review of Murad *et al.* (2010) reveal that SDL get associated with moderate improvement in the knowledge and they further suggest that it could effectively improve the affective and psychomotor domains. This is also mentioned in the study conducted by Avdal (2013, p. 838) that learner students with high SDL abilities score high in terms of the level of achievement. According to Murad *et al.* (2010, p.1057) SDL is as effective as, or better than, traditional teaching methods for the acquisition of clinical knowledge and attitudes. In the same vein, Brydges *et al.* (2009, p.507) indicate that SDL clinical technical skills increase greater skills retention. SDL has also shown to be essential in assisting nurses meet the challenges of current day healthcare. In addition, it provides acceptable levels of satisfaction to the learners while conducting feasible projects (Yoo, Yoo & Lee, 2009, p.585; Murad &Varkey, 2008, p.580).

1.2 THEORETICAL ASSUMPTIONS OF THE STUDY

Self-directed learning is a major component of andragogy theory and is relevant to the present study because learners are expected to be self-directed in order to cope with constantly changing healthcare demands. Andragogy philosophy is defined as the art of helping adults learn (Knowles, 1970). This study assumes that: adults are self-directed and responsible for their own learning (Knowles, 1984). It is, therefore, expected that learners would be motivated to learn, self-monitor their learning process, plan and implement strategies to meet their learning goals in the clinical skills development, and have effective interpersonal communications skills that would enable them when seeking assistance with meeting their learning goals.

1.3 PROBLEM STATEMENT

Amongst the strategies that a School of Nursing has introduced is the new skills development method adopted from international higher education partners Hoogeshool, Arnhem and Nijmegen, and the University of Maastrich (Jeggels, Traut & Kwast, 2010, p.51). The implementation of the method has been into existence for the past 25 years (Bokken, Van Dalen & Rethans, 2006, p.781).

The introduction of a clinical skills development method expect the clinical supervisors to assume facilitators' roles while guiding learners in acquiring clinical skills while learners are assuming an active role in their learning process. The skills laboratory methods comprises of four phases namely; orientation, visualization, guided practice, independent practice and assessment.

Orientation; during the orientation phase the learners are orientated to skills laboratory method and given an overview of the phases of the skills lab methods. Explanation on how the skills method facilitates SDL, expectation of learners, need of the pre-requisite knowledge is given during this phase. It is also during this phase that the learners are introduced to the clinical supervisors and human simulated patient. *Visualization*; the students engage with this phase before the clinical placement period in a group of 8-12 learners. During this phase learners have their first encounter with the clinical skills being demonstrated by clinical supervisors and allowed to ask questions or voice their opinions after the visualization of the skill. *Guided practice*; learners attend the planned guided practice session either at the clinical setting or skills laboratory supervised by the clinical supervisors. Learners are taught the skill through lecture demonstration and further encouraged to develop critical thinking, reflective practice and value feedback. *Independent practice*; this is the phase in the skills laboratory methods where the learners take responsibility of their own learning and chooses to practice independently based on the identified learning needs. Learners may choose to use simulated patients who give immediate feedback after practice or video tape the practice session and get the feedback from the peers or clinical supervisors. Alternatively they may practice on the model that gives feedback electronically. *Assessment*; this is the phase where the learners are assessed on their competence and they are aware of the assessment tool. During the formative assessment the learners identify their learning needs and referred to the skills lab to participate in remedial activities such as independent practice. In the summative assessment which are conducted at the skills lab are meant for evaluate the level of learners on the clinical competence.

The skills laboratory is accessible to learners through the booking system in all working days excluding during lunch hour. Learners indicate their own time in the provided booking book when they would practice independently based on their identified clinical learning needs. There is always a skills laboratory coordinator who ensures that learners use the required equipment or materials and sign for the procedures practiced so as to act as evidence of independent practice.

This study focuses on the independent practice phase when the learners are expected to be self-directed learners. During the independent practice phase, learners are exposed to the skills laboratory methods and they assume responsibility for their own learning and choose to practise independently, based on their identified learning needs. Learners may choose to use human simulated patients who provide immediate feedback after practice or by conducting an audio-visual recording of the practice session to get feedback from their peers or clinical supervisors. Alternatively, they may practise on the model that provides feedback electronically.

After having adopted an innovative clinical skills training method in 2006 from its international higher education partners, the clinical supervisors in a School of Nursing in the Western Cape report that many students are not practising independently during SDL in the skills laboratory (Jeggels *et al.*, 2010, p.55). In questioning the commitment of some students' engagement during self-directed learning activities, clinical supervisors ask students to produce evidence of independent practice prior to clinical evaluation. In addition, during monthly clinical co-ordination meetings for the lectures and clinical supervisors, complaints are raised concerning the learners' motivation towards SDL in the skills laboratory. Yet, the goal of the independent practice is to motivate learners 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.

The change of teaching students towards self-directed learning has been found advantageous for enabling students to acquire skills for clinical practice (Murad *et al.*, 2010, p.107). It has nevertheless been observed that a challenge is the lack of students' commitment towards SDL in a clinical skills laboratory at a School of Nursing. They demonstrate an inability to monitor their learning process, as well as to plan and implement strategies that may assist them with achieving their goals. It is, therefore, unclear how students perceive SDL during the clinical activities in a skills laboratory at a School of Nursing.

1.4 RESEARCH QUESTION

What were the perceptions of first year learner nurses on self-directed learning during clinical activities in a skills laboratory at a School of Nursing in the Western Cape?

1.5 PURPOSE OF THE STUDY

The purpose of this study was to explore and describe the perceptions of first year learner nurses about self-directed learning during clinical activities in the skill laboratory at a School of Nursing in the Western Cape.

1.6 OBJECTIVES OF THE STUDY

The objectives of the study were to explore and describe the perceptions of first year learner nurses about their:

- 1 motivation towards self-directed learning during clinical activities in a skills laboratory;

- 2 ability to plan and implement self-directed learning during clinical activities in a skills laboratory;
- 3 ability to self-monitor their self-directed learning during clinical activities in a skills laboratory; and
- 4 ability to use their interpersonal communication skills about self-directed learning during clinical activities in a skills laboratory.

1.7 RESEARCH DESIGN

An exploratory descriptive quantitative design was used in this study. Quantitative research is a formal, objective, systematic process during which numerical data are used to obtain information about the world (Burns & Grove, 2009, p.22). According to Burns and Grove (2009, p.237), an exploratory design provides insight and increases the knowledge of the field of study while a descriptive design aims at providing a picture of situations as they naturally occur. In the context of the study, respondents' perceptions about self-directed learning during the clinical activities in a skills laboratory was deductively explored and described and results were presented in frequencies.

1.7.1 Population and sample

According to Burns and Grove (2009, p.342), population refers to a specific type of individual or element who is the focus of the research. The target population was all the first year learner nurses pursuing a 4-year bachelor nursing degree at a School of Nursing in the Western Cape (N=336). Simple random sampling was followed to select a sample (n=168).

1.7.2 Inclusion criteria

- All the first year learner nurses registered for four year bachelor nursing degree programme
- All the first year learner nurses who had registered for foundation nursing but currently doing first year level

1.7.3 Exclusion criteria

- All the students repeating first year level

1.7.4 Method of data collection

Data collection was undertaken by using a self-administered data-collection instrument. The questionnaire was developed on the basis of a literature study and comprised two sections. Section A consisted of the biographical and demographic information of the respondents. Section B comprised 40 items to be rated on a 5-point Likert scale: (1) =strongly disagree, (2) =Disagree, (3) =don't know, (4) =Agree, and (5) =Strongly agree). According to Burns and Grove (2009, p.707), a Likert scale is a designed instrument to determine the opinion or attitude of respondents and contains a number of declarative statements about the topic with a selection scale after each statement. The researcher got permission from the Director of the School of Nursing, lecturers and students to hand out the questionnaires during the piloting of the instrument and during the actual study. Respondents who took part in the pilot study were not included in the main study. The respondents were asked to complete the questionnaire in their own time and return them at an arranged date in a closed envelop. The instrument took around 20 minutes to complete.

1.7.5 Data analysis

The Statistical Package for Social Sciences (SPSS) Version 21 software program was used to analyse the data with the assistance of a statistician. According to Burns and Grove (2009, p.44), data analysis reduces and organises data in order to give meaning. Descriptive statistics were conducted to present the frequency, mean values, and standard deviation of observations. Descriptive statistics are employed to describe, summarise, organise, and visually represent data in a condensed manner (Brink, 2006, p. 171). The findings were presented in the format of tables.

1.8 RELIABILITY AND VALIDITY

According to Brink (2006, p.118), validity refers to the accuracy and faithfulness of scientific findings while reliability describes the consistency, stability, and repeatability in participants' results given the same initial circumstances. In ensuring content and face validity, five nursing experts in nursing education were consulted to assist with evaluation of the items in the questionnaire to determine whether they measured the targeted construct. Content validity of an instrument refers to how well it reflects the construct being measured (Burns & Grove, 2009, p.380). Face validity, on the other hand, means that the instrument appears to measure what it intends to measure (Brink, 2010, p 160). Through an extensive literature review, the researcher ensured that each item of the instrument was congruent to the objectives and the concepts used in the theoretical framework/literature.

In order to ensure the reliability of the research questionnaire, a pilot study was conducted as a trial run for the measuring instrument, since it was tested under the same conditions as the proposed study. Burns and Grove (2009, p.713) describe a pilot study as a small version of a

proposed study conducted to refine methodology, such as the instrument or data collection process. From the results of the pilot study, the internal consistency of the questionnaire was measured with the assistance of a statistician with the purpose of computing the Cronbach alpha coefficient of reliability. It was expected that a value closer to .1 would indicate that the questionnaire was highly reliable and that it could be confidently used for collecting data from the respondents. If the Cronbach alpha was low ($>.7$), items included in the questionnaire would have been rechecked in order to identify possible flaws and to rephrase or rewrite them (Chapter 3).

1.9 RESEARCH ETHICS

Research ethics of the following human right principles were adhered to during this study:

Respect for persons: Respondents were treated as autonomous agents, since they were informed that their participation in proposed study was voluntary and they had the right to withdraw from the study at any time and without any penalty (Burns & Grove, 2009, p.190).

A right to protection from discomfort and harm: There were no anticipated risks of participating in the proposed study, since the respondents were protected from any form of physical or mental discomfort (McMillan & Schumacher, 2006, p.143).

Privacy: It refers to the respondents' right in determining the time, extent, and general circumstances under which his/her present information is shared with or withheld from other people (Brink, 2006, p.33). The respondents were assured that the information would only be available to the researcher, supervisor, and the statistician. Any conversation between the researcher and the respondents would remain confidential.

Anonymity: According to Brink (2006, p. 34), while ensuring anonymity, the respondents' identities are kept secret with regard to their participation in the study. Therefore, the respondents' identities remained anonymous, since the questionnaires were required to be returned without identification details. Code numbers were assigned to the questionnaire in order to conceal the respondents' identity.

Confidentiality: Confidentiality requires the researcher's to manage private information of respondents in such a way that it does not get shared with other people unless the respondents have authorised the sharing (Burns & Grove, 2009, p.196). All the data gathered were only available to the researcher, supervisor, and statistician and all the responses to the questionnaires would be kept in a secure place under lock and key for five years after the results had been published.

Fair selection of respondents: Brink (2006, p.33) recommends fairness in the selection of the study population and the respondents in particular. Therefore, the selection of the respondents was drawn regardless of the social status, race, or any organisational affiliations.

Obtaining informed consent: Informed consent was obtained from the respondents after they had understood everything about the study and after all their questions were answered. Detailed information about the aims, objectives, potential benefits of the study, how data was to be collected, and voluntary participation was given to the respondents. According to Burns and Grove (2009, p.201), consent is the prospective respondents' agreement to participate in a study as subjects after they have fully understood the essential information.

1.10 SIGNIFICANCE OF THE STUDY

The restructuring of the education and health sector in the country in 2003 resulted in an increased enrolment of learners, staff shortages, as well as reduced bed capacity and accredited clinical sites from 2004 at a School of Nursing in the Western Cape. Therefore, it necessitated the need for innovative teaching and learning strategies to be employed during clinical skills development.

According to Murad *et al.* (2010, p.1057), SDL is effective and better than traditional teaching methods for the acquisition of clinical knowledge and attitudes. In the same vein, Brydges *et al.* (2009, p.507) indicate that SDL clinical technical skills increase skills retention. Therefore, the results of this study may also contribute the existing body of knowledge of the perceptions of first year learner nurses about SDL in the skills laboratory. Exploring the perceptions of learners on a new teaching and learning approach may also enable the training institution to create an environment that would facilitate its utilisation. The results may also be used at a School of Nursing to enhance SDL, since it is essential in helping nurses to meet the challenges of current day healthcare demands.

1.11 OUTLINE OF THE STUDY

Chapter 1: Orientates the reader to the study background, problem statement, purpose and objectives of the study, significance of the study, definition of concepts, ethics of research, and limitations of the study.

Chapter 2: Describes the relevant literature that has been consulted in relation to the study objectives, the concept “self-directed learning”, and the adult learning theories that are associated with self-directed learning.

Chapter 3: Presents the research methodology of the present study and describes the research design, study population, participants and sampling procedures, criteria for participation, data instrument, and data analysis procedure. It further describes the ethical aspects of this study.

Chapter 4: In this chapter, study findings are presented, interpreted, and discussed.

Chapter 5: Presents a summary of the findings, limitations, conclusion, and recommendations of this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The literature study was conducted to determine and analyse what was already known about the topic of interest, to select a research design, and to establish the theoretical framework to be employed (Burns & Grove, 2009, p.95). The topic of study was “First year learner nurses’ perceptions on self-directed learning during clinical activities in the skills laboratory”. The following electronic databases were accessed: CINAHL, Education source, ERIC, Health Source: Nursing/Academic Edition, Masterfile Premier, Medline, and Google Scholar. Further, books associated with the study were consulted too. Research keywords used were perceptions, self-directed learning, clinical nursing skills, motivation, monitoring, planning and implementation, and interpersonal communication.

The literature review focused on the theories of adult learning, the concept of “self-directed learning”, and studies related to research objectives with the following subheadings: learning motivation, self-monitoring, planning and implementation, and interpersonal communication.

2.2 THEORIES OF ADULT LEARNING

The theories of adult learning assume that adult learners possess the following attributes: self-direction, maturity, independence, responsibility, individuality, intrinsic motivation to learning and their learning relates to previous experiences and social roles (Murad &Varkey, 2008, p.583). Theories that focus on adult learning include: constructivism, humanism, the

Schönmodel, the Kolb learning cycle, and andragogy (Fosnot & Perry, 1996, p. 8; Knowles, 1970; Kolb, 1984, p. 20; Schon, 1983; Rogers, 1969).

The constructivism theory has also been widely employed in adult education where self-directed learning is a major component, since learning is not presumed to be acquired by conveying knowledge into an empty reservoir but is rather built by the learners based on their prior knowledge, experiences, as well as cultural and psychosocial background (Jacobs & Hundley, 2010, p. 21; Kaufman online, 2003, p.213; Peters, 2000, p.167). Candy (1991, p.278) writes about self-directed learning: “Learning is an active process of constructing systems of meaning. As such the constructivist view of learning is particularly compatible with the notion of self-direction since it emphasizes the combined characteristic of active inquiry, independence and individuality in a learning task”.

The Schön and Kolb learning models link well with the philosophy of self-directed learning, since learners take decisive actions to bridge the identified gaps on the grounds of their individual experiences and reflections on those perceived gaps (Kolb & Kolb, 2005; Borduas, Gagnon, Lacoursière, & Laprise, 2001, p. 103). For example, after the learners face a question that requires knowledge, psychomotor, or affective skills that they do not possess, it evokes learning. Learners then progress through stages of acquiring the new knowledge or skills and then return to the first stage to start a new cycle (Borduas *et al.*, 2001; Svinicki & Dixon, 1987).

A humanistic point of view regards learning as a deeply personal act that is undertaken to fulfil one’s potential by progressing towards self-actualisation (Jacobs & Hundley, 2010, p. 21; Billings & Halstead, 2009, p. 210). Furthermore, humanists aim to equip learners with

autonomy and ability to be self-directed and responsible for their learning process; to determine their own needs, goals, and objectives; and to conduct self-evaluations. Merriam and Brockett (2007, p. 40) further assert that humanists assume that learners are internally motivated and are able to identify their own learning needs. It is, therefore, viewed that the humanistic perspective is also closely related to andragogy.

Andragogy theory has been defined as the art of helping adults to learn (Knowles, 1970) in contrast with the traditional mode of pedagogy. According to Quinn (1980, p.46), Malcolm S. Knowles urges that the model is based on different assumptions about the learner in relation to five dimension; namely the concept of the learner, the role of the learner's experience, learner's readiness to learn, the learner's orientation to learning, and motivation to learn. The application of the theory assumes that learners are self-directed in their learning process. Knowles discusses these five basic assumptions that describe adult learners:

- *Learner's self-concept:* Adults are self-directed and take responsibility for their learning. SDL is defined by Knowles (1975, p.18) as the process during which individuals take the initiative with or without the assistance of other people to diagnose their learning needs, formulate learning objectives, identify human material resources for learning, choose and implement appropriate learning strategies, and evaluate learning outcomes;
- *Role of learner's experience:* Adults have greater and more varied experiences that serve as a rich resource for learning;
- *Learner's readiness to learn:* Adults' readiness relates to the things they need to know and do in life;

- *Student's orientation to learning:* Adults have a life-centred orientation to learning involving task-centred approaches and problem solving; and
- *Student's motivation:* Adults are largely motivated internally; e.g. self-esteem, and better quality of life.

The present study focuses on two of the assumptions as stated by Knowles: adults are self-directed and take responsibility of their own learning, and they are largely internally motivated to learn (Knowles, 1984). Self-directed learning is a major component of andragogy theory and it is relevant to the present study because learners are expected to be self-directed in order to cope with constantly changing healthcare demands.

Andragogical theory requires the methods of instruction that take note of the need for self-direction by the learners and the support from peers and the training institution. Such support should enable them to determine their own learning needs, work collaboratively, and monitor progress towards accomplishment of their learning goals (Billings & Halstead, 2009, p. 208). Cameron (1997) indicates that a comprehensive model for SDL should involve self-management, self-monitoring, and motivation. In support of the above discussion; in South Africa, the National Qualification Framework (2012) of the South African Qualification Authority (SAQA) considers first year studies as a Level 5 qualification where the learners are expected to demonstrate the ability to communicate information reliably in either written, or oral format. Furthermore, they are expected to be able to evaluate their own performance, take appropriate action when necessary, and take responsibility of their own learning process. In order to effectively address one's learning needs, communication skills play a vital role. That is why developing communication skills of Baccalaureate students are greatly emphasised (American Association of Colleges of Nursing, 2008).

In light of the preceding argument and the literature review, it is assumed that learners are motivated to learn, self-monitor their learning process, plan and implement strategies to achieve their learning goals in the clinical skills development, and have effective interpersonal communications skills that will enable them to seek help in meeting their learning goals.

2.3 SELF-DIRECTED LEARNING

The term SDL is used extensively in the literature to refer to various concepts in learning; such as self-education, self-teaching, autonomous learning, independent learning, and the term is interchangeably used with individualised instructions and contract learning (Hiemestra, 1994; Piskurich, 1993, p. 359). However, in conducting a systematic review, an explicit definition of SDL in the literature is problematic and presents challenges (Murad *et al.*, 2010, p. 1065). According to Murad and colleagues, SDL is defined as a process during which individuals take the initiative with or without the help of other people to diagnose their learning needs by formulating learning objectives, identifying human material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. In the same vein, the study that reviews the literature about SDL in health profession education and frameworks based on Malcolm Knowles shows that the key components of SDL are: the educators as facilitator, identification of learning needs, development of learning objectives, identification of appropriate resources, implementation of process, commitment to a learning contract, and evaluation of learning (Murad & Varkey, 2008, p. 580). Therefore, it requires the active participation and concerted effort of one's own learning process.

Despite several studies that reveal continued elusiveness of SDL in its definition, nature, purpose, and worthiness by the students and educators (Pryce-Miller online, 2010, p.21;

Hewitt-Taylor, 2002, p.496); the concept is widely used in nursing education. In light of this scope, SDL does not only expect of students to study, read or perform learning tasks. It also encompasses practical solutions that realistically support the students towards independent learning (Timmins, 2008, p.302), for example availability of human and material learning resources that learners may use in the skills laboratory. For this reason, it is suggested that time and investment of resources are required in this activity to transform aspiration into reality, and to reduce the burden placed on the students when expectations are pitched too high (Timmins 2008, p.302). Therefore, some levels of facilitation are needed; for example teaching SDL skills, and how they can identify learning needs.

2.3.1 Why is self-directed learning important?

Finkelman and Kenner (2012, p. 133) suggest that SDL is important for all students nurses, since it leads to a greater ability to achieve lifelong professional learning. Being a lifelong learner would assist the individuals to cope with constantly changing technology and health challenges. It is, therefore, important to accept that SDL is imperative for nurse educators and students alike (Li, Deng & Chen, 2009, p.737).

Several studies have established that SDL is viewed as a powerful motivator for learning; learners learn how to learn, feel empowered to reflect on their learning process, and increase participation in classrooms (ChingMok, 2012, p.403). The systematic review of Murad *et al.* (2010) reveals that SDL is associated with moderate improvement in the knowledge, and they further suggest that it could be effective in improving the affective and psychomotor domains. This is also confirmed in the study conducted by Avdal (2013, p. 838) who indicates that nursing students with high SDL abilities score high in terms of their levels of achievement.

According to Murad *et al.* (2010, p.1057), SDL is as effective as, or better than, traditional teaching methods for the acquisition of clinical knowledge and attitudes. In the same vein, Brydges *et al.* (2009, p.507) indicate that SDL clinical technical skills, in turn, increase greater skills retention. Further, SDL is considered to be essential for assisting nurses with meeting the challenges of current day healthcare requirements and acceptable for providing satisfaction to the learners by conducting feasible projects (Yoo *et al.*, 2009, p.585; Murad &Varkey, 2008, p.580).

2.4 LEARNING MOTIVATION

Nursing education aims to motivate learner nurses to acquire skills for offering appropriate quality healthcare services to patients with multiple and complex health problems. However, meeting such an objective for a long time has been a challenge to academic institutions. It is for this reason that paying attention to the concept of learning motivation in clinical education is of great significance (Kosgeroglu, Acat, Ayranci, Ozabaci & Erkal, 2009, p. 331). It is further suggested that an understanding of learners' motivation is the key to effective instructional designs, since variations in teaching techniques may be associated with academic motivation (Komarraju & Karau, 2008, p.70; Tallent-Runnels, Thomas, Lan, Cooper, Ahern, Shaw & Liu, 2006, p.93).

According to Lee and Yuan (2010, p. 56), learning motivation is an inner drive that gives an individual the energy to maintain learning and achievement of goals, through objective understanding during learning activities. Schunk, Pintrich and Meece(2008) view motivation as a process that requires the students' physical and/or mental activity to be directed at attaining their goals.

Extensive literature establishes that learning motivation is associated with several benefits. A study conducted to understand the effects of learning motivation about the achievement of the vocational universities in Taiwan reveals a significant positive effect on study achievement, whether the students are intrinsically or extrinsically motivated (Lee & Yuan, 2010, p. 56). Intrinsically motivated students possess a driving force to learn, to perform and a wish to succeed, while extrinsically motivated students perform for attaining a desirable grade or for avoiding failure (Ryan & Deci, 2000, p.68). According to Nilsson and Stomberg (2009, p.1), nursing students are extrinsically motivated to learn in order to become nurses and their positive motivation is equally distributed throughout the entire educational experience. Nilsson and Stomberg further provide an insight that the students have different degrees of motivation during their academic training. However, in a study about self-efficacy, Walker, Greene and Mansel (2006, p.1) report that extrinsic motivation is a predictor for shallow cognitive engagement in learning tasks, while intrinsic motivation is associated with meaningful engagement. In contrast, Nilsson and Stomberg's (2008, p. 1) study reveals that nursing students mention intrinsic motivation factors as an explanation for their level of motivation.

Furthermore, motivation is considered to be beneficial for learning and achievement, since motivated students invest more time in their courses and this is viewed as a necessary prerequisite for adult learning (Pintrich & Schunk, 2002; Wlodkowski, 2008). In light of this claim, a study aimed at investigating the association between medical students' perception of their quality of life, motivation to learn, and estimated grade at the end of the year reveals that motivation to learn is linked to the importance of academic achievement (Henning, Krägeloh, Hawken, Doherty, Zhao& Shulruf, 2011, p. 142). In the same vein, Pintrich and Zusho (2007,

p.731) postulate that a model based on social cognition theory shows that motivation for learning has an impact on the outcome in relation to academic achievement.

However, according to Dearnley and Mathew (2007, p. 377), negative attitudes towards studies explain decreased motivation and it is further noted that motivation increases with the students' age. Furthermore, a study conducted at the New Zealand University to measure the aspects of motivation and self-regulation reveals that students with low motivation levels for studying experience more self-perceived problems in the areas of concentration, self-monitoring, the use of education materials, and developing time management skills than the students with high motivation levels (Henning, 2007, p. 164).

Wlodkowski (2008) argue that viewing human motivation as purposeful allows for the creation of effective ways to assist adults with sustaining learning and completing their learning. Therefore, in striving to enhance students' learning motivation, educators are using new technologies, such videos, in SDL that show a positive effect on students' perception in relation to the enhancement of their learning motivation (Bravo, Amante, Simo, Enache & Fernandez online, 2011, p. 638). Related to this finding, Abar and Loken (2010, p.25) have found that the relationship between SDL and academic orientation has the potential to mediate variables in academic motivation. In the same vein, Winne and Nesbit (2010, p. 653) argue that the potential mediating outcome is also consistent with the reported relationship between motivation and engagement.

The findings from the aforementioned studies are relevant to the scope of this study. They suggest that learning motivation plays a significant role in learning, since it supports the hypothesis that intrinsically and extrinsically motivated learners are likely to learn with relative

ease. Therefore, they are likely to successfully achieve expected learning outcomes. In light of this hypothesis, a learner's motivation to learn may influence his/her SDL engagement in his/her clinical skills development and consequently improve psychomotor and affective skills.

2.5 SELF-MONITORING

Self-monitoring is one of the attributes that adult learners should possess with an aim of improving current practices. Even professionals engage in self-monitoring to inform their continued practice, self-regulate performance, and guide their lifelong learning (Batalden & Davidoff, 2007, p.1059). It is, therefore, expected that learner nurses get involved in self-monitoring in order to identify the learning gaps in their skills development and to seek to address them. Evidence suggests that self-directedness in students is enhanced when learners are given the opportunity and structures to self-assess in order to set learning goals and monitor their learning process (Nicol & Macfarlane-Dick, 2006, p. 199). In the same light, Maclellan and Soden (2006, p. 95) assert that an enhanced SDL is an outcome of self-assessment.

White and Gruppen (2007) emphasise the observation that self-monitoring is an integral part of effective self-directed learning and its practice encourages students to develop their ability to direct their own learning and responsibility. In literature, self-monitoring is synonymously used with self-assessment and reflection (Sargeant, 2008, p.1). Self-assessment has been described as a personal, unguided reflection on performance for the purpose of generating an individually derived summary of one's own level of knowledge, skills, and understanding in a particular area (Eva & Regehr, 2008, p.14).

Several studies have reviewed the beneficial effect of self-monitoring to learners, professionals, as well as training facilities. Nicol and Macfarlane-Dick (2006, p.199) have

found that the opportunities and structures that enable students to self-assess, set goals, and monitor their learning progress enhance self-directedness; a view shared by Maclellan and Soden (2006, p. 95) when they argue that self-directed learning is enhanced as an outcome of self-assessment. Furthermore, self-monitoring has a positive impact on students' personal and professional development, especially in their autonomy and thinking skills (Fitzpatrick, 2006, p.37). It has further been perceived that self-evaluation enhances learners' learning strategies and aids them in becoming independent and confident; it empowers learners to set high goals and to try and realise these goals (Levett-Jones, 2007, p. 112). Thomas, Martin and Pleasants (2011, p. 1) argue that self-evaluation also improves the students' judgements about their future and enhances their learning.

In a cross-sectional study conducted about the evaluation of nursing internship trainees' self-evaluation of clinical skills with their teachers' evaluation. Adib-Hajbaghery, Karbasi-Valashani and Heidari-Haratmeh (2012, p. 94) have found a significant correlation between students' general self-assessment scores and the scores allocated by their teachers. This finding appears to concur with the findings of Kersh, Evan, Kontiainen and Bailey (2011, p.290) who reveal that the self-evaluation process contributes to learners' motivation and development.

Acknowledging the significance of self-assessment, the Lasater Clinical Judgment Rubric assists first nursing year students and their training facility by providing a common language about the development of student clinical judgement skills and further enables the training facility to provide effective feedback to learners about their self-assessment about clinical judgement (Lasater, 2011, p. 86). In addition, a pre-test and post-test quasi-experimental study about nursing students' self-evaluation using a video recording of foley catheterisation reveals

that their general competency in nursing skills could be improved when they are given an opportunity to review and reflect on their performance (Yoo, Yoo & Lee, 2010, p. 402).

Although a positive impact of self-monitoring has been observed in a number of studies, some flaws are identified. A comparative study of a small sample (n = 25) between nursing students' self-assessment and faculty evaluation reveals that students overestimate or underestimate their competence (Baxter & Norman, 2011, p. 2406). Further, an evaluative study of videotaping first year nursing students as a learning and self-assessment tool for psychomotor skills development on wound dressing reveals that students overrate their performance in comparison with the faculty ratings (Watts, Rush & Wright, 2009, p. 214).

Despite several studies conducted about learners' self-monitoring yielding mixed findings, its significance in the learning continues to be relevant. Its relevance has resulted in regarding self-evaluation to be an important factor in the process of professional development of medical and nursing in Canada and America (Yalcin & Erkal-İlhan, 2008, p. 51) and many health professional training curricula incorporate some form of planned self-assessment in their learning process (Sargeant, Armson, Chesluk, Dornan, Eva, Holmboe, Lockyer, Loney, Mann & Van der Vleuten, 2010, p. 1212). Self-monitoring has been noted to be an important skill that self-directed learners should strive to acquire because the inability to accurately assess their own skills does not only limit learners' professional growth but also has the potential to compromise nursing care (Watts *et al.*, 2009, p. 214). It is recommended that professionals have an obligation to assess their own competency for practice; hence the students should be provided with a platform to self-assess throughout their academic programme (Levett-Jones, 2007, p. 112).

The learners' ability of self-monitoring their learning process is associated with several benefits. Therefore, the perceptions of learner nurses of their ability to self-monitor their learning process on the skills development result in taking decisive actions to enhance SDL during clinical activities in the skills laboratory.

2.6 PLANNING AND IMPLEMENTATION

Planning and implementation of appropriate strategies to bridge the identified needs are vital in each individual learner's learning process, particularly in the present study.

According to Frese, Krauss, Keith, Escher, Grabarkiewicz, Luneng and Friedrich (2007, p. 1481), planning is required to convert thought and intentions into action. In addition, Webb and Sheeran (2007, p. 295) assert that planning makes goal attainment a more automatic process in the sense that an individual engages in goal-directed behaviour without conscious intent. Planning is important across a breadth of tasks and it is one of the self-regulatory processes that occur in learners that self-direct their learning process (Sitzmann & Ely, 2011, p. 421). Further, Pintrich and Zusho (2007, p. 731) propose that the way in which students implement self-regulated strategies also impacts on outcomes, such as how they plan and approach academic goals. Anticipated outcomes provide a direction for the action to be taken and provide a time frame for achieving goals.

It is, therefore, expected that learners identify their learning needs through self-assessment, peer assessment, and effective feedback from the faculty measured against its expectations of the learners; they devise a plan for effecting change in their perceived learning gaps. In several instances, nursing education uses learning contracts that encourage the students to devote

themselves to achieve the intended goals (Bailey & Tuohy, 2009, p.758; Timmins, 2002, p. 190).

According to Sitzmann and Johnson (2012, p. 967), learners benefit from planning interventions when they are associated with another intervention; such as monitoring, and concentration in encouraging self-regulation. A study aimed at exploring the progress students are making in achieving the development of their language proficiency and metacognitive knowledge and skills when employing SDL as an instructional method reveals that completing a written plan facilitates reflection and enables the students to return to it or revise it all (Cotteral & Murry, 2009, p.34). The study by Li and Burke (2010, p. 289) conducted with fourth-year sub-internship students in Internal Medicine and Paediatrics shows that the individualised learning plans facilitate the setting of learning objectives and strategies. Li, Tancredi, Co and West (2010, p. 124) further state that successful learners set objectives that are specific, measurable, realistic, and linked to a timeline for completion.

Regardless of how important planning is, it does not guarantee a change in learners' behaviour, since some may fail to follow through with their initial plan or may redirect their attention toward alternative goal pursuits. However, benefits are observed when the plans are being followed or implemented (Tyler-Smith, 2006, p.295). Implementation of plans requires a certain amount of commitment, time, as well as effort on the part of teacher and students (Fengning, 2012, p.223).

Planning and implementation of planned strategies in an attempt to bridge the learning gaps have shown to be important during the learning process of learners. In the present study,

learner nurses are assumed to possess the ability to plan and implement SDL during clinical activities that assists them with their clinical skills development.

2.7 INTERPERSONAL COMMUNICATION SKILLS

In any teaching and learning environment where students are actively involved in their learning process, effective interpersonal communication remains a necessity for positive learning outcomes. According to West and Turner (2010, p. 9), interpersonal communication is defined as a message transaction amongst people to create and sustain sharing meaning. It has also been found that interpersonal communication is a fundamental skill to clinical practice, as well as in self-directed learning strategies, such task-based learning (SharifahSulaiha, Nurjahan & Nagarajah, 2009, p. 8).

A study conducted to assess effective teaching methods for physical examination among medical students reveals that interpersonal and communication skills facilitate acquisition of the skill (Martens, Duvivier, Dalen, Verwijnen, Scherpbier & Vleuten, 2009, p.184). Furthermore, a study conducted with first-year medical students about the assessment of their own communication skills indicates that communication skills provide a foundation for their profession development, as well as facilitate multidisciplinary collaboration with other members of the healthcare team (Zick, Granieri & Makoul, 2007, p. 161). In addition, Nokdee's online (2007) study reveals that, through interpersonal communication, nurses in clinical practice are able to achieve self-directed learning by asking questions to senior nurses and doctors during patient rounds where they identified knowledge and skills gaps. Interpersonal communication is important in achieving physical safety, belonging, self-esteem and self-actualisation (Woods, 2012, p. 12; West & Turner, 2010, p. 9). This suggests that, in order to

achieve self-actualisation in one's career aspirations, interpersonal communication plays a significant role. It is reported that, in a classroom setting, students who are considered to have high interactive involvement show improvement in their academic performance and increase in the learning motivation for the course (Myers & Bryant, 2002, p. 146).

Therefore, in the context of the present study, the findings from the previous reviewed studies assume particular importance, since they reveal how significant interpersonal communication is during learning. The ability of learner nurses to use their interpersonal communication skills during SDL in their clinical skills development is assumed to have an impact on the improvement of their clinical skills competence on the grounds that students, who direct their learning, seek help in order to improve the quality of their learning (Valle, Cabanach, Rodriguez, Núñez & González-Pienda, 2006, p.168). In the process of seeking help, interpersonal communication skills are used.

2.8 CONCLUSION

The literature informs the adult learning theories and how they link to the concept self-directed learning, the significance of SDL in the clinical skills development, and its significance. It includes the studies in relation to the study objectives: learning motivation, self-monitoring, planning and implementation learning strategies, and interpersonal communication about self-directed learning. The next chapter describes and discusses the methodology used to conduct the study.

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

3.1 INTRODUCTION

This chapter presents the methodology that was used to conduct the present study. It first describes the research design, then clarifies the study population and sampling procedures, and concludes by describing the data collection and data analysis procedures.

3.2 RESEARCH DESIGN

Creswell (2009, p.3) describes research design as plans and procedures for research that influence decisions from broad assumptions to detect methods of data collection, analysis, and interpretation. On their part, Burns and Grove (2009, p.218) view research design as the blueprint for conducting a study. They assert that this blueprint maximises control over different aspects that may influence the study and directs the researcher in planning and implementing the study in the way that the intended goals are most likely to be achieved.

In light of the preceding conceptualisation and for the purpose of this study, an exploratory descriptive quantitative design was employed in order to gain an understanding on the study phenomenon. Consistent with this stance, the study aimed at exploring and describing the perceptions of first year learner nurses of self-directed learning during clinical activities in the skills laboratory at a School of Nursing in the Western Cape. The chosen design sought to

ensure that the study fulfilled the particular purpose and was completed with the available resources (Blanche, Durrheim & Painter, 2006, p.34).

3.2.1 Quantitative research

Quantitative research is a formal, objective, systematic process in which numerical data are used to obtain information about the world (Burns & Grove, 2009, p.22). This is in contrast with qualitative research that is systematic though interactive and subjective in its approach for describing life experiences of individuals or groups more in-depth and giving them meaning (Burns & Grove, 2009, p.717; Creswell, 2009, p.4). The choice of a descriptive is relevant to the context of this study because such a kind of study has not been done where respondents' perceptions about self-directed learning during the clinical activities in a skills laboratory are deductively explored and described and results presented in frequencies. Furthermore, the design strives for maximal objectivity in its strict methodological approach to ensure possible accuracy by the researcher (Jonker & Pennink, 2010).

3.2.2 Exploratory design

An exploratory design examines a subject of study that is relatively new, since it provides a basic familiarity with the topic and yields new insights (Babbie, 2010, p.93; Babbie & Mouton, 2001, p. 79). In the context of the study site, such a study had not been conducted, hence explorations led to a better understanding and generated a new understanding of the construct being investigated. Therefore, the use of the exploratory design enabled to test the feasibility of undertaking more extensive studies about students' perceptions of self-directed learning during the clinical activities in a skills laboratory. This stance is in accordance with the view of Burns

and Grove (2009, p.237) when they mention that an exploratory design provides insights and increases the knowledge of the field of study.

3.2.3 Descriptive design

Descriptive design explains the variables being studied and provides flexibility in examining a problem from many different angles, consequently providing a picture of situations as they naturally occur (Boswell & Cannon, 2010, p.176; Burns & Grove, 2009, p.237). Therefore, in the process of conducting this study, the researcher observed and then described in a highly structured statistical analysis the different perceptions reported by the study respondents. The researcher adopted a quantitative approach that consisted of grouping collected data into classes and using descriptive measures to explain the construct under investigation.

3.3 POPULATION

A population is described as the entire group of persons or objects that are of interest to the researcher for the purpose of generalising the study findings (Babbie, 2010, p.199; Brink, 2006, p.123). In this study, the term target population was used to describe the total set of individuals or elements who met the selection conditions and of whom study outcomes were intended (Burns & Grove, 2009, p. 143; Fain, 2009, p. 90). The target population was all the first year learner nurses who were pursuing a 4-year Bachelor nursing degree at a School of Nursing in the Western Cape (N=336). The choice of the target population was of interest to the researcher because it was their first encounter of being exposed to self-directed learning in the skills laboratory. Therefore, an understanding of students' perceptions of self-directed learning during the clinical activities in a skills laboratory during their first year of nursing training enabled the faculty members to enhance or facilitate this method that would

consequently improve their clinical skills development while they were progressing in the nursing programme.

3.4 SAMPLE

Sampling is described as a process of selecting just a small group of cases or people from a large group with which to conduct a study that is hoped to be representative of all the entire population (Walliman, 2011, p.93; Burns & Grove, 2009, p. 343). In addition, the sampling must ensure that the selected set of elements from the target population accurately portrays the elements from the total population (Babbie, 2010, p.199).

The sampling method that was employed in the present study was probability sampling. This type of sampling enabled the researcher to ensure that every member of the study population had an equal chance of being included in the study. Further to this, probability sampling techniques helped the researcher to ensure that the sample was representative of the whole population from which it was drawn compared to non-probability techniques of which findings cannot be generalised (Walliman, 2011, p.96; Babbie, 2010, p.199).

The method used for the selection was simple random sampling. Brink (2006, p.128) asserts that various techniques, such as fishbowl and table of random numbers, could be used to select simple random samples. Based on this premise, the class lists were obtained from the lecturers of all first year learner nurses and compiled into a single list where individual numbers were assigned next to each learner. Using a table of random numbers, the first three digits were selected randomly since the target population (N=336) consisted of three digits. Subsequently, adjacent three digits numbers were selected following the columns until 168 sets of numbers were selected. Numbers that were not representative of the target population, those selected

twice and from exclusion criteria were omitted. This informed the list of the invited respondents for the study.

This sampling technique reflects the simple random nature of the probability sampling, since Fain (2009, p.90) argues that simple random sampling as a method of selecting subjects in which every subject has an equal chance of being included. The rationale for choosing this sampling method was the fact that the study population was clearly defined and every element was known to the researcher. Furthermore, this sampling technique was expected to estimate accuracy; lessen sampling errors and the opportunity of conscious or subconscious bias by the researcher (Babbie, 2010, p.200; Brink, 2006, p.126).

The participants of the study comprised both female and male learners who were registered for the first year Bachelor degree programme. These respondents were from different linguistic backgrounds that are: English, Afrikaans, Zulu, Xhosa, Sotho, Pedi, Tswana, Swati, and their ages ranged from less than 19 years to 23 years and above. Among the respondents were also the learner nurses who had been in the one year foundation programme before starting the four year degree. The foundation programme comprised learners who did not meet the required prerequisites for entry in the main stream four year degree programme.

3.5 METHOD OF DATA COLLECTION

3.5.1 Data gathering

Data was collected during the first two weeks of May, 2013. Prior to collecting the data, the researcher received ethical clearance from the University of the Western Cape (Annexure D) and requested written approval from the Director of the School of Nursing (Annexure F).

Furthermore, the permission was sought by providing detailed information about the study and by inviting learners to participate in the study to answer questions raised from the information given. Those respondents who were selected and accepted to participate in the study were given informed consent forms to sign to indicate their voluntary acceptance to participate in the study. They were also given questionnaires to complete in their own time, expected to take 20 minutes to complete. The researcher arranged a date on which she planned to collect the completed questionnaires in closed envelopes.

3.5.2 Instrument

In order to collect the data that could elicit participants' perceptions about self-directed learning during clinical activities in the skills laboratory, a self-administered questionnaire was used. This is a questionnaire in which respondents are asked to complete the questionnaires themselves (Babbie, 2010, p.270). The study questionnaire was developed from a literature study as existing instruments were not specifically for SDL in a nursing skills laboratory (Cheng, Kuo, Lin, & Lee-Hsieh, 2010, p. 1152; Williamson, 2007, p.66; Fisher, King & Tague, 2001, p. 516; Guglielmino, 1977). The questionnaire is comprised two sections. Section A consisted of the biographical and demographic information of the respondents that included their gender, age, and linguistic backgrounds. Section B comprised 40 items that were rated on a 5-point Likert scale; with (1) =strongly disagree, (2) =Disagree, (3) = Don't know, (4)=Agree, and (5)=Strongly agree. A Likert scale required respondents to respond to series of statement to express a point of view by reading each statement and selecting an appropriately ranked response (Fain, 2009, p.132). In the scope of this study, the items addressed were grouped into four domains that related to the four study objectives, namely:

- Learning motivation (from Item 1 to Item 11);
- Planning and implementing (from Item 13 to Item 23);
- Self-monitoring (from Item 25 to Item 35); and
- Interpersonal communication (from Item 37 to Item 43).

The respondents were asked to rate each item according to the given scale, since all the items were positively stated. One open-ended question in each of the 4 domains made provision for respondents' comments (Items 12, 24, 36 and 44).

In the context of this study, learning motivation was defined as an inner and external drive that propelled the desire for SDL in the skills laboratory. Planning was defined as the ability to independently set up learning objectives, identify available learning resources in the skills laboratory, and determine how and when to achieve the learning objectives. Implementation was the ability to carry out a set plan to achieve the learning objectives. Self-monitoring was defined as the ability to evaluate one's learning process and while making progress during SDL in the skills laboratory. Interpersonal communication was defined as the ability to interact with other people in order to enhance learning in the skills laboratory during SDL.

3.5.3 Piloting and pre-testing of the instrument

A pilot study was conducted as a smaller study (n=10) before the main study. In the scope of this study, the process of piloting was achieved when the questionnaires were handed out to 10 first year learners after the researcher had sought permission from the Director of the School, lecturers, as well as the learners. The learners (respondents) were asked to complete the questionnaire in their own time and to return it at an arranged date in a closed envelope. Data analysis was conducted (See Point 3.5.4).

As a result of the piloting, it was found that the instrument took about 20 minutes to be completed. The ten respondents who took part in the piloting of the instrument were excluded from the sampling process to participate in the major study.

Furthermore, five nursing experts in Nursing Education were requested to partake in pretesting of the questionnaire. According to Kumar (2010, p. 393), pretesting of the instrument entails an examination of each question for its clarity, understanding, wording, and meaning as understood by the potential respondents. Pretesting is done to detect possible flaws of the instrument; such as ambiguity of instruction or wording, time taken to administer the entire instrument, as well as to determine whether it is useful for gathering the desired information (Polit, 2008, p. 380).

There were some minor language issues that needed to be revised in order to ensure a better understanding of some items and four open-ended questions were included. Therefore, in order to enhance validity, the researcher reviewed and revised the questionnaire with the help of the supervisor and the statistician.

3.5.4 Reliability of the instrument

In order to ensure the reliability of the questionnaire, the results of the pilot of the instrument were used to establish the internal consistency of the questionnaire with the assistance of a statistician. The internal consistency served to check the degree of consistency of items across the four groups, on the one hand, and the degree of consistency of items within each group, on the other hand. The statistics used was Cronbach alpha coefficient (index). It was expected that values closer to .1 could indicate that the questionnaire was highly reliable and, therefore could, be confidently used for collecting data from the respondents while values lower to .7

could suggest a need to revise the questionnaire (Burns & Grove, 2009, p.7; Pallant, 2011, p.100). Cronbach's alpha values for the four domains suggested that the study questionnaire was reliable (Table 3.1).

Table 3.1: Cronbach's alpha co-efficient reliability statistics

Domains	Cronbach's alpha tests
Learning motivation	.82
Self-monitoring	.74
Planning and implementation	.85
Interpersonal communication skills	.72

3.5.5 Validity

According to Brink (2006, p.118), validity refers to the accuracy and faithfulness of scientific findings while reliability relates to the consistency, stability and repeatability of participants' results when collected in similar circumstances as the initial circumstances. In order to ensure the validity of the study questionnaire, two types of validity measures were used: content validity and face validity. Content validity of an instrument refers to how well it reflects the construct being measured (Burns & Grove, 2009, p.380), while face validity relates to how the instrument appears to measure what it is intended to measure (Brink, 2006, p 160).

In the scope of this study, the questionnaire content validity was established through the evaluation of items by five nursing education experts during pre-testing in order to see whether or not they measured the targeted constructs. Furthermore, the researcher, through an extensive

literature review, ensured that each item of the instrument was in line with the objectives and the concepts used in the theoretical framework/literature. On the other hand, face validity of the instrument was established through an intuitive judgement made by the five experts who indicated that the instrument appeared to measure what it was intended to.

3.6 DATA ANALYSIS

Data analysis reduces and organises data in order to present it meaningfully to the readers (Burns & Grove, 2009, p.44). Therefore, the Statistical Package for Social Sciences (SPSS) version 21 software programme was used to analyse the data with the assistance of a statistician after the raw data from the questionnaires were captured. Descriptive statistics was utilised to present the frequency, mean values, and standard deviation of observations. Descriptive statistics are employed to describe and summarise data in a condensed manner, organised and visually represented (Brink, 2006, p. 171). Frequency refers to the number of times that the observations occur while the mean is the average of all the observations in a distribution (Brink, 2006, p.172). McMillian and Schumacher (2006, p.167) define standard deviation as a numerical index that indicates the average variability of the scores and informs us of distance between the average of the scores and the mean. These indices are presented in tables.

Spearman's correlation coefficient was used to determine the correlation between the four domains addressed in the instrument. In ordinal data and where the criteria for Pearson's analysis cannot be met, the Spearman Rank Order correlation coefficient test is used to identify relationships among variables (Pallant, 2011, p.128; Burns & Grove, 2009 p.482).

3.7 CONCLUSION

This chapter describes the research methodology used in the present study in order to answer the study objectives. The following chapter presents and discusses the results of the present study.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4.1 INTRODUCTION

The present study aimed at exploring and describing the perceptions of first year learner nurses about self-directed learning during clinical activities in the skills laboratory. In light of this aim, the following four objectives were expected to be achieved. Firstly, to describe and explore the perceptions of first year learner nurses about their motivation towards SDL during clinical activities in the skills laboratory. Secondly, to explore and describe the perceptions of first year learner nurses about their ability to self-monitor their SDL during clinical activities in the skills laboratory. Thirdly, to explore and describe the perceptions of first year learner nurse about their ability to plan and implement SDL during clinical activities in the skills laboratory. Lastly, to explore and describe the perceptions of first year learner nurses about their ability to use their interpersonal communication skills in relation to SDL during clinical activities in the skills laboratory.

This chapter presents the results of data obtained from the questionnaire that was administered to 153 respondents. The descriptive statistics presents the nominal and ordinal data in frequencies, percentages, mean values, and standard deviations.

4.2 GENERAL DESCRIPTION

A total of 168 questionnaires were handed out and 158 (94.0%) were returned. Out of the 158 returned questionnaires, 153(91.0%) were fully completed and, therefore, were considered for analysis. The presentation and analysis of results in this chapter consist of a total number of 153 participants (100.0%).

4.3 PRESENTATION OF BIOGRAPHICAL AND DEMOGRAPHIC DATA

The first section of the study questionnaire requested the 153 respondents to provide their biographical information in relation to their gender, age, home language, and foundation programme. Table 4.1 summarises the biographical and demographic information of the 153 respondents in relation to the aforementioned variables.

In relation to respondents' gender, the data indicated that, of the 153 respondents, 124(81.0%) respondents were women while 29(19.0%) were men. About the respondents' age, the data in Table 4.1 indicates that 21(13.7%) of the respondents were less than 19 years old and 58 (37.9%) were 19 years old. These statistics suggest that marginally more than half of the respondents, 79 (51.6%), were younger than or at least 19 years old. On the other hand, 27(17.6%) of the respondents were 20 years old, 18(11.8%) were 21 years old, 10(6.5%) were 22 years old, 1(0.7%) respondent was 23 years old, and 18 (11.8%) respondents were 23 years and older.

Their linguistic profile indicate that the majority of the respondents' home language was Xhosa 61(39.9%); followed by Afrikaans 39(25.5%), English 27 (17.6%), Sotho 6(3.9%), Zulu 2(1.3%), Swati 2(1.3%), Tswana 1(0.7%), and respondents 12 (7.8%) selected other home

languages. Finally, in relation to prior registration in the foundation programme, the data indicate that, amongst the 153 respondents, 131(85.6%) did not take part in the foundation programme while 22(14.4%) did.

Table 4.1: Analysis of biographical and demographic data (Learner Nurses', n=153)

Variables	Responses (n)	Percentage (%)
Gender		
Male	29	19.0
Female	124	81.0
Age		
< 19years	21	13.7
19years	58	37.9
20years	27	17.6
21years	18	11.8
22years	10	6.5
23years	1	0.7
>23years	18	11.8
Home language		
English	27	17.6
Afrikaans	39	25.5
Zulu	3	2.0
Xhosa	61	39.9
Sotho	6	3.9
Pedi	2	1.3
Tswana	1	0.7
Swati	2	1.3
Other	12	7.8
Foundation programme		
Yes	22	14.4
No	131	85.6

4.4 DESCRIPTIVE RESULTS

In this section, the descriptive results are presented in relation to the four investigated domains of the four study objectives. The four domains are: (i) the perceptions about learning motivation, (ii) self-monitoring, (iii) planning and implementation, and (iv) interpersonal communication skills of first year learner nurses. Each domain is presented in a summary table that comprises a detailed description of the number of responses, percentages, mean values and standard deviation for each item question in the questionnaire. The following section focuses on the learning motivation domain.

4.4.1 Learning motivation

This section comprised eleven questions (Items 1- 11) that aimed at eliciting respondents' perceptions of their motivation towards SDL in the skills laboratory during clinical activities (Table 4.2).

For discussion purposes, reference is made to:

- responsibility and positivity towards learning (Items 1,2,3,4 and 5);
- factors influencing learning (Items 6, 7, 10and 11); and
- challenges and self-confidence towards learning (Items 8and 9).

Responses of open questions will be integrated in this discussion.

Table 4.2: Learning motivation

Item number	Learning motivation	Scale Frequency n (%)					Total n (%)	\bar{x}	SD
		SD n (%)	D n(%)	DN n (%)	A n (%)	SA n (%)			
1	I find learning important because it enables me to further my understanding of a procedure.	2 (1.3)	2 (1.3)	2 (1.3)	52 (34.0)	95 (62.1)	153(100.0)	4.54	.716
2	I know I am responsible for my learning process.	2 (1.3)	1 (0.7)	2 (1.3)	64 (41.8)	84 (54.9)	153(100.0)	4.48	.689
3	I love to learn about new clinical nursing skills.	2 (1.3)	1 (0.7)	6 (3.9)	63 (41.2)	81 (52.9)	153(100.0)	4.44	.724
4	I find learning interesting because it gives me new ways of looking at the world of nursing.	2 (1.3)	3 (2.0)	4 (2.6)	61 (39.9)	83 (54.2)	153(100.0)	4.44	.759
5	I like to learn because I want to gain skills in caring for patients.	3 (2.0)	0 (0.0)	7 (4.6)	61 (39.9)	82 (53.6)	153(100.0)	4.43	.759
6	My successes in the programme inspire me to continue learning.	4 (2.6)	2 (1.3)	11 (7.2)	54 (35.3)	82 (53.6)	153(100.0)	4.36	.878
7	I learn the clinics skills to avoid failure.	5 (3.3)	6 (3.9)	12 (7.8)	61 (39.9)	69 (45.1)	153(100.0)	4.20	.974
8	I view problems as challenges, not obstacles.	1 (0.7)	15 (9.8)	30 (19.6)	58 (37.9)	49 (32.0)	153(100.0)	3.91	.982
9	I am self-confident to perform a clinical procedure on my own.	3 (2.0)	14 (9.2)	35 (22.9)	76 (49.7)	25 (16.3)	153(100.0)	3.69	.920
10	I have a curious mind that makes me learn about different things in the skills laboratory that are new.	2 (1.3)	9 (5.9)	19 (12.4)	88 (57.5)	35 (22.9)	153(100.0)	3.95	.841
11	I am persistent in learning the clinical skills I don't have.	4 (2.6)	3 (2.0)	30 (19.6)	81 (52.9)	35 (22.9)	153(100.0)	3.92	.858
Overall Mean/ Standard deviation								4.21	.827

NOTE: In the questionnaire SD, strongly disagree; D, disagree; DN, don't know; A, agree; SA, strongly agree. While \bar{x} , Mean; SD, Standard deviation

4.4.1.1 Responsibility and positivity towards learning (Items 1, 2, 3, 4 and 5)

Item 1

Almost all (n=147; 96.1%) of the respondents *agreed to strongly agreed* about the **importance of learning, since it enables them to further their understanding of a procedure**. The responses were closely distributed around the mean value (4.54; SD= .716), showing respondents' positive perceptions of the importance of learning, since it further enabled their understanding of a procedure. One respondent in an open question (Item 12) stated: "*SDL is very important because it helps us a lot as practice makes perfect*". With a similar view, another respondent mentioned that: "*If you practise more you do it perfectly*". This seemed to suggest that the utilisation of SDL enhanced their understanding of a procedure, as well as the perfecting of the skill. However, a minority 6 (3.9%) of 153 (100%) respondents indicated that they *strongly disagreed to did not know* for the suggested item.

Item 2

Billings and Halstead (2009, p. 210) state that students are responsible for their own learning in a humanistic perceptive of education. Therefore, in this item that related to respondents' **own responsibility in their learning process**, the vast majority of the respondents (n=148; 96.7%) of the 153 (100.0%) revealed a positive perception (*agree to strongly agree*). More than half of the respondents (n=84; 54.9%) *strongly agreed* that they were aware of their responsibility in the learning process (\bar{x} = 4.48; SD=.689). Brockett and Hiemstra (1991, p. 26) further assert that individuals' willingness or ability to take control of their learning determines the potential for self-direction. One respondent, to an open question (Item 12), stated: "*I wish we could have*

extended time for the SDL to improve our skills". Similarly, another respondent suggested that: *"They should give us more bookings, even lunch break"*. The respondents' response might suggest a sense of responsibility for their learning process, hence they valued more time for SDL. With the concept of self-direction, individual learners take responsibility of their learning process, since they take initiative with or without the help of other people to diagnose their learning needs, formulate the learning objectives, identify human or material resources for learning, plan and implement the appropriate learning strategies, and evaluate the learning outcomes (Knowles, 1975, p.18).

Item 3

About half (n=81; 51.9%) of the 153 (100.0%) respondents *strongly agreed* that **they loved to learn about new clinical nursing skills**. The majority (n=144; 93.1%) of the respondents *agreed to strongly agreed* with their affection to learn about clinical nursing skills (\bar{x} =4.44; SD.724). One respondent, to an open question (Item 12), stated: *"SDL is good and am learning a lot but I wish when doing procedure we are supervised"*. Another respondent indicated that: *"Supervisors should check on us during SDL"*. Owing to positive perceptions of SDL, respondents suggested the need of supervision by faculty to assist the learning process.

Item 4

In response to this item, that related to **finding learning interesting, since it enabled new ways of looking at the world of nursing**, the vast majority (n=144; 94.1%) of the respondents *agreed to strongly agreed*. More than half, 83(54.2%), of the 153 (100.0%) respondents *strongly agreed* with finding learning interesting with a narrow distribution of

responses around the mean value ($\bar{x} = 4.44$; $SD = .759$). One respondent, to an open question (Item 12), stated: “*SDL helps me to understand more the theory of nursing [fundamentals of nursing]*”. Neophytes might have different views about what nursing entailed. It was encouraging to note that SDL enabled the bridging of the theory-practice gap as mentioned by a respondent in an open-ended question.

Item 5

Similarly to the preceding item, the majority ($n=143$; 93.5%) of the 153 (100.0 %) respondents *agreed to strongly agreed* with **enjoying to gain skills in caring for patients**. More than one third ($n=61$; 39.9%) of the respondents *agreed* with enjoying gaining skills in caring for patients ($\bar{x} = 4.43$; $SD = .759$). In response to an open question (Item 12), a respondent stated that: “*I wish the bookings were not so full for SDL*”. While another respondent wrote: “*Bookings are difficult as there are many of us*”. These responses might suggest that respondents were enjoying gaining skills in caring for patients; however, SDL as method to support that process was challenged in relation to adequate time and space for students to practise the clinical skills.

The items that related to the respondents’ responsibility and positivity towards learning showed that the majority of them had positive perception of their learning. It is worth mentioning that a positive perception by learners of the need for learning plays a significant role in the learning process and it portrays their motivation for learning. Through an understanding of the learning activities, the learners’ inner drive provides them with maintenance in learning and achievement of goals (Lee & Yuan, 2010, p.56). Furthermore, this motivation consequently

requires the application of their physical or mental activity for attaining their goals (Schunk *et al.*, 2008).

Respondents' positivity towards learning could be associated with their orientation to learning as adult learners. Knowles (1980, p.44) explains that adult learners view education as a process of developing competence to achieve their full potential in life. As prospective nurses, they require the knowledge and skills that would enable them to work effectively; hence, they are performance-centred in their orientation to learning. This view appears to concur with a view articulated in a study that has aimed to gather information about what students consider important for their motivation to attain knowledge where it is revealed that students' experience of what they have learnt is relevant and necessary in order to manage working as a nurse (Bengtsson & Ohlsson, 2010, p.155).

4.4.1.2 Factors influencing learning motivation (Items 6, 7, 10 and 11)

Item 6

Learning motivation has a significant positive effect on learning achievement, whether the students are either intrinsically, or extrinsically motivated (Lee & Yuan, 2010, p. 56). This item interrogated whether **students' success in the programme inspired them to continue learning**. The majority (n=136; 88.9%) of the 153 (100.0%) respondents *agreed to strongly agreed* in their responses. On the other hand, 17(11.1%) of the respondents *strongly disagreed to did not know* that success inspired them to continue learning (\bar{x} =4.36; SD=.878).

Item 7

Less than half (n=69; 45.1%) of the 153 (100.0%) respondents *agreed* that they **learned the clinical skills to avoid failure**, and responses showed a normal distribution around the mean value of 4.20 (SD=.974). The vast majority (n= 130; 85.0%) of the respondents *agreed to strongly agreed* that they learned clinical skills to avoid failure. One respondent, to an open question (Item 12), stated: “*SDL is really nice. It prepares me for the evaluation with [sic] my supervisors*”. This response might suggest that not only did SDL enhance the clinical skills but also prepared the respondents for evaluation by their clinical supervisors in order to pass. According to Ryan and Deci (2000, p.68), extrinsically motivated students perform to attain a desirable grade or to avoid failure. In clinical education, studies reveal that achievement, becoming nurses, and having an interest in people and in caring for them are motivating factors for learning (Bengtsson & Ohlsson, 2010, p. 154; Mrayyan, Modallal, Awamreh, Atoum, Abdullah & Suliman, 2008, p.126;). The researcher assumed that due to extrinsic motivation, respondents perceived the item positively.

Item 10

More than half (n=88; 57.5%) of the respondents *agreed to having curious minds in learning new things in the skills laboratory* ($\bar{x} = 3.95$; SD=.841). More than three quarters (n= 123; 80.4%) of the 153 (100.0 %) respondents *agreed to strongly agreed* that their curious minds encouraged them learn about different things in the skills laboratory that were new. According to Knowles (1990), adult learners’ motivation is internal and it arises from their curiosity. Based on the respondents’ answers and assumptions of adult leaning, the researcher concluded that learners had a strong desire to learn and were motivated towards SDL. Some respondents,

to an open question (Item 12), stated: “*When I go to fill my name for a procedure, it is always full*”. In the same vein, another respondent mentioned that: “*For me, they must make more time for the 1st years in the lab*”. It seemed learners desired more time in the laboratory to learn new skills.

Item 11

Three quarters (n= 116; 75.8%) of the 153 (100.0%) respondents *agreed to strongly agreed* about their **persistence in learning the clinical skills they did not possess** (\bar{x} = 3.92; SD=.858). However, 24.2% (n=37) of the respondents *strongly disagreed to did not know* how to persist in learning if they did not possess the clinical skills. Lee and Yuan (2010, p. 56) indicates that learning motivation is an inner drive of an individual, through objective understanding during learning activities, that provides the energy for maintaining learning and achieving goals. It is, therefore, expected that motivated learners would persevere in ensuring that their learning objectives are achieved.

4.4.1.3 Challenges and self-confidence towards learning (Items 8 and 9)

Item 8

Slightly more than two thirds (n= 107; 69.9%) of the 153 (100.0%) respondents *agreed to strongly agreed* about **viewing problems as challenges, not obstacles**. Slightly more than one third (n= 58; 37.9%) of the total respondents *agreed* that they regarded problems as challenges and not as obstacles. On the other hand, almost one third (n=46; 30.1%) of the respondents *strongly disagreed to did not know* about their view of problems as challenges, not obstacles. This item had the widest distribution of responses around the mean value (\bar{x} = 3.91; SD=.982)

of all the items about motivation of learning. One respondent, to an open question (Item 12), stated that: “*The lecture also gives us additional experiences that they had to go through or overcome*”. Sharing of experiences by the lecturers or clinical supervisors with the learners about how they had overcome challenges might encourage learners to view problems encountered as a process of growth and not as obstacles to their learning process.

Item 9

Self-confidence is defined as trust in one’s abilities, qualities, and judgment (Pocket Oxford English Dictionary, 2005). Less than half (n=76; 49.7%) of the 153 (100.0%) respondents *agreed* about their **self-confidence to perform a clinical procedure on their own**. Only two thirds (n=101; 66.0%) of the 153 (100.0%) respondents *agreed to strongly agreed* that they perceived themselves as self-confident to perform a clinical procedure on their own. On the other hand, slightly more than one third (n= 52; 34.1%) of the respondents *strongly disagreed to did not know* to the item, suggesting their perceptions of a lack of self-confidence to perform a clinical procedure on their own. This item had the lowest mean value ($\bar{x} = 3.69$; SD=.920) about the aspect of learning motivation. This might be interpreted that self-confidence for performing a clinical on their own could be due to the nursing level and new exposure to the clinical procedure. Bambini, Washburn and Perkins (2009, p.69) assert that clinical skills learning and clinical simulation experiences in the skills laboratory effectively increase students’ confidence in their ability to perform clinical skills. Baillie and Curzio (2009) further describe the lack of exposure to clinical skills results in loss of confidence, and the lack of belief that can jeopardise the safety and comfort of patients. Furthermore, previous academic

and life experiences provide students with self-confidence and competence for every day situation (Brown, O'Mara, Hunsberger, Love, Black, Carpio, Crooks&Noesgaard, 2003).

In summary, most of the respondents agreed with being motivated towards SDL (Items, 2, 3, 4, 5, 6, 7, 11 and 12). However, items to which responses agreed less than 70% related to viewing problems as challenges and not obstacles (Item 8), and to having self-confidence to perform a clinical procedure on their own(Item 9).

4.4.2 Self-monitoring

This section presents the respondents' perceptions about their ability to self-monitor their SDL during clinical activities in the skills laboratory. Table 4.3 comprises eleven items (Items 13 – 23) with the aim of eliciting the respondents' perceptions about self-monitoring.

For the purpose of the discussion, reference is made to:

- ability to identify learning gaps and strategies (Items 14, 15, 18, 21, and 22);
- constant check-ups on the learning gaps (Items 13,16, 17,19, and 23); and
- self-governing (Item 20).

Table 4.3: Self-monitoring

Item number	Self-monitoring	Scale Frequency n (%)					Total n (%)	\bar{x}	SD
		SD n (%)	D n (%)	DN n (%)	A n (%)	SA n (%)			
13	There are so many things I want to learn that I wish I had the time for.	4 (2.6)	4 (2.6)	6 (3.9)	43 (28.2)	96 (62.7)	153(100.0)	4.46	.896
14	If there is something I want to learn, I can figure out a way to learn it.	2 (1.3)	5(3.3)	19 (12.4)	69 (45.1)	58 (37.9)	153(100.0)	4.15	.857
15	I can identify my own learning needs.	0 (0.0)	6 (3.9)	12 (7.8)	90 (58.8)	45 (29.4)	153(100.0)	4.14	.717
16	I gladly accept feedback about my performance.	3 (2.0)	7 (4.6)	12 (7.8)	76 (49.7)	55 (35.9)	153(100.0)	4.13	.886
17	I can assess my learning objectives if they have been achieved.	1 (0.7)	4 (2.6)	13 (8.5)	99 (64.7)	36 (23.5)	153(100.0)	4.08	.693
18	I understand the strengths or weaknesses of my clinical skills.	3 (2.0)	4 (2.6)	23 (15.0)	74 (48.4)	49 (32.0)	153(100.0)	4.06	.868
19	I can closely observe my learning process by marks or feedback.	4 (2.6)	5 (3.3)	17 (11.1)	81 (52.9)	46 (30.1)	153(100.0)	4.05	.884
20	I understand myself as an independent learner.	3 (2.0)	6 (3.9)	27 (17.6)	61 (39.9)	56 (36.6)	153(100.0)	4.05	.937
21	I know what I want to learn, for example search for specific information about clinical skills.	1 (0.7)	6 (3.9)	21 (13.7)	90 (58.8)	35 (22.9)	153(100.0)	3.99	.765
22	I know how I learn best, for example with my fellow peers or watching a video.	2 (1.3)	6 (3.9)	29 (19.0)	73 (47.7)	43 (28.1)	153(100.0)	3.97	.866
23	I continuously monitor my learning process by checking my feedback on procedures performed.	1 (0.7)	17 (11.1)	20 (13.1)	81 (52.9)	34 (22.2)	153(100.0)	3.85	.916
Overall Mean/ Standard deviation								4.08	.844

NOTE: In the questionnaire SD, strongly disagree; D, disagree; DN, don't know; A, agree; SA, strongly agree. While \bar{x} , Mean; SD, Standard deviation

4.4.2.1 Ability to identify learning gaps and strategies (Items 14, 15, 18, 21, and 22)

Item 14

Adult teaching and learning principles based on Knowles' Model of adult learning (Knowles, 1975) suggest that, with the assistance of the faculty, the learners can identify the resources to employ in meeting their learning objectives. On the other hand, it is suggested that learners should self-assess their own knowledge, explore the available resources, and make an informed judgment when selecting the solutions to problems (Karimi, Arendt, Cawley, Buhler, Elbarbry & Roberts 2010). Therefore, in relation to the identification of the learning strategies, more than three quarters (n= 127; 83.0%) of the 153 (100.0%) respondents *agreed to strongly agreed* to their **ability to figure out a way how to learn something they wanted to know** (\bar{x} = 4.15; SD=.857). In contrast, 26 (17.0%) of the respondents responded that they *strongly disagreed* to *did not know* how to learn something new by figuring it out. The positive perceptions of this item concur with the assumptions that adult learners would be able to figure out ways how to learn something they want, provided that they get assistance from the lecturers/clinical supervisors.

Item 15

According to Billings and Halstead (2009, p. 208), students must be able to determine their own learning needs. In this item, the vast majority of the respondents (n= 135; 91.8%) *agreed to strongly agreed* with their **ability to identify their own learning needs** (\bar{x} = 4.14; SD=.717). On the other hand, (n=18; 11.7%) of the 153 (100.0%) respondents *strongly agreed to or did not know* about their ability to identify their own learning needs. One respondent, to an open

question (Item 24), stated: “*Being on my own in the skills lab gives me time to understand and get what my mistakes are, but it also gives pressure when you not sure*”. This suggested that most of the respondents had positive perceptions about their adult learners’ role of identifying their own learning needs.

Item 18

Andrade and Valtcheva (2009, p. 12) argue that the purposes of self-assessment are to identify areas of strength and weakness in one’s work in order to make improvements and promote learning. In this item, more than three quarters (n= 123; 80.4%) of the respondents *agreed* to *strongly agreed* with **understanding their strengths or weaknesses of their clinical skills** (\bar{x} =4.06; SD=.868). One respondent, to an open question (Item 24), stated: “*After I have done SDL and have been evaluated, I need to go back and look what I did wrong*”. However, 30 (19, 6%) indicated that they *strongly disagreed* to or *did not know* about identifying their areas of strengths and weaknesses.

Item 21

This item represented a minority of 35(22.9%) of the 153 (100.0%) respondents who *strongly agreed* that that they **knew what they wanted to learn, for example the specific information about the clinical skills**. Twenty eight (18.3%) of the respondents differed in opinion and indicated that they *strongly disagreed* to or *did not know* what they wanted to learn. However, more than three quarters (n= 125; 81.7%) of the respondents *agreed* to *strongly agreed* to the suggested item (\bar{x} = 3.99; SD=.765). One respondent, to an open question (Item 24), mentioned: “*I don’t understand some procedures and I find no one to explain to me*”. The

knowledge of what they wanted to learn, for example the specific information about clinical skills, are indicated by most of the respondents as their ability to identify or diagnose their learning needs like it was expected of adult learners who are self-directed (Quinn, 1980, p.46).

Item 22

Murad *et al.* (2010, p. 1057) postulate that SDL is more effective when the learners are involved in choosing learning resources. Knowles (1975) suggests the same view that learners in consultation with faculty members choose appropriate learning resources based on their preferred learning method and learning objectives and that the psychomotor objectives are best learnt by skills practice exercises, role-playing, and simulation. Therefore, to this item, three quarters (n= 116; 75.8%) of the 153(100.0%) respondents *agreed to strongly agreed with their knowledge about how they learn best, for example with their fellow peers or by watching a video* (\bar{x} =3.97; SD=.866). Almost a quarter 37(24.2%) of the 153 (100.0%) respondents indicated that they *strongly disagreed* or *did not know* how they learned the best. Murad *et al.* (2010, p. 1057) further recommend that learners should be involved in choosing learning resources and strategies that enable them to find the most appropriate resources to fit their individual learning styles, as well as the comprehensive learning objectives.

4.4.2.2 Constant check-ups on the learning gaps (Items 13, 16, 17, 19, and 23)

Item 13

Almost all (n=139; 90.9%) of the 153 (100%) respondents *agreed to strongly agreed* that **there were many things they wanted to learn if they had time**, and this item had the highest mean score value (\bar{x} = 4.46; SD=.896) on self-monitoring in SDL. One respondent, to an open

question (Item 44), stated: “*I want to learn more, but we get too little time to do all the work at once*”. In light of this finding, efficient time management and guidance from the faculty members can lead to a significant increase in students’ academic performances and, consequently, academic success (Indreicaa, Cazanb & Truţac, 2011, p.1096). The respondents’ perceptions of this item necessitated support from the faculty members to encourage and develop time management skills. One respondent, to an open question (Item 24), mentioned: “*I think we have little time to learn all the things that are expected of us*”. The way learners perceive and use time has an influence on their clinical skills development.

Item 16

Van de Ridder, Stokking, McGaghie & ten Cate (2008, p. 189) define feedback in clinical education as: “specific information about the comparison between a trainee’s observed performance and a standard, given with the intent to improve the trainee’s performance”. Indeed, literature suggests that positive and constructive use of feedback greatly contributes to clinical instruction and to improving students’ performance of skills (Fjortoft, 2006, p. 64). More than three quarters of the respondents **gladly accepted feedback about their performance**, (n= 131; 84.7%) in this item (\bar{x} = 4.13; SD=.886). Some respondents (n=22; 14.4%) had a problem with receiving feedback and indicated responses of *strongly disagree* and *did not know*.

Item 17

First year learner nurses, according to South Africa Qualifications Authority (2012), are expected to be able to evaluate their own performance and to take appropriate action when

necessary. Moreover, they are expected to take responsibility for their own learning process. In this item, a large number of respondents (n= 135; 88.2%) *agreed to strongly agreed* with their **ability to assess learning objectives when they had been achieved**; this with the highest mean value, as well as a narrow spread in relation to the mean scores (\bar{x} =4.68; SD=.693). The positive perception of most respondents of this item is an essential attribute of adult learners. Billings and Halstead (2009, p. 208) assert that self-directedness and the ability to monitor progress during the completion of goals are important characteristics of adult learners.

Item 19

According to Wright (2012, p. 721), students seek feedback as a way of measuring their improvements and gaining insights into which areas they still needed to work on. The vast majority of 127 (83.0%) of 153 (100.0%) respondents *agreed to strongly agreed* with having the **ability to closely observe their learning process by marks or feedback** (\bar{x} = 4.05; SD=.884). In this item, less than one quarter (n=26; 17.0%) of the 153 (100.0%) respondents *strongly disagreed* to or *did not know* of their ability to closely observe their learning process by their marks or feedback. One respondent, to an open question (Item 12), stated: “*Maybe get someone to assist you and show you the procedure because you could be practising the wrong way*”. This response seemed to suggest that through feedback from another person some learners closely observed their learning process.

Item 23

Epstein, Siegel and Silberman (2008, p. 5) view self-monitoring as being characterised by an ability to attend, moment to moment, to one’s action; a curiosity to examine the effects of those

actions; and a willingness to use those observations in order to improve behaviour and patterns of thinking in the future. On the other hand, the self-assessment process is viewed as a result of its feedback component rather than the practice of self-assessment isolated from feedback (Al-Kadri, Al-Moamary, Habib Al-Takroni, Chris Roberts & Van der Vleuten online, 2012). In support of the preceding study; Colthart, Bagnall, Evans, Allbutt, Haig, Illing and McKinstry (2008, p.124) state that the accuracy of self-assessment can be enhanced by feedback, by providing clear assessment criteria, and by benchmarking guidance.

Therefore, in light of this item, more than half (n= 81; 52.9%) of the 153 (100.0%) respondents *agreed* with their **ability to continuously monitor their learning process by checking their feedback of the procedures performed** (\bar{x} =3.85; SD= .916). Furthermore, nearly three quarters (n=115; 75.1%) of the respondents *agreed* to *strongly agreed* with the suggested item. Almost one quarter (n=37; 24.2%) of the 153 (100.0%) respondents *disagreed* with or *did not know* about their ability to continuously monitor their learning process by checking their feedback of the procedures performed. It is worth mentioning that this item had the lowest mean value, and the responses were widely spread in relation to the mean score suggesting challenges in continuously monitoring their learning process.

4.4.2.3 Self-governing (Item 20)

Item 20

Slightly more than one third (n= 56; 36.6%) of the 153 (100.0%) respondents *strongly agreed* with **being independent learners** (\bar{x} =4.05; SD=.937). On the other hand, almost one quarter (n=36; 23.5%) of the respondents indicated *strongly disagreed* and *did not know* to the

suggested item. Based on the adult learning theory assumptions, adult learners are independent, as well as self-directed (Knowles, 1980, p.46). However, Mohanna, Cottrell, Wall and Chambers (2011, p.180) argue that self-directedness does not develop overnight; but it develops at different levels depending on the previous teaching, the assessment experiences, or the context of learning. Therefore, self-directed adult individuals need to be nurtured when they are not ready to assume responsibility for their own learning. One respondent, to an open question (Item 24), stated: *“It allows you to make your own mistakes and be able to fix them without someone telling you”* in contrast with another respondent who mentioned: *“I think when doing self-directed learning there must be someone to guide me, if I am doing the right thing”*.

In conclusion, most of the respondents *agreed* with their ability to self-monitor their own activities during SDL in the skills laboratory (Items 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 and 23). In all the items, more than (70%) of the respondents *agreed* to *strongly agree* with the suggested items. The findings indicated that the respondents seemed to identify their learning gaps and strategies, constantly monitored their learning gaps, and self-governed their learning process.

4.4.3 Planning and implementation

This section presents the respondents’ perceptions about their ability to plan and implement SDL in the skills laboratory. Table 4.4 comprises the eleven questions (Items 25 – 35) that elicited the respondents’ perceptions about planning and implementation.

For the purpose of discussion reference is made to the ability to:

- formulating learning objectives and choosing of learning resources (Items 25, 26, 29, and 35); and
- developing of a plan and time management (Items 27, 28, 30, 31, 32, 33and 34).

4.4.3.1 Formulating learning objectives and resources (Items 25, 26, 29and 35)

After having identified the learning needs, learners are expected to devise plans for achieving their learning needs while considering the preferred available learning resources. Li and Burke (2010, p. 289) assert that individualised learning plans assist with setting learning objectives and strategies. It is in these individualised plans that the learning objectives are defined.

Table 4.4: Planning and implementation

Item number	Planning and implementation	Scale Frequency n (%)					Total n (%)	\bar{x}	SD
		SD n (%)	D n (%)	DN n (%)	A n (%)	SA n (%)			
25	I prioritise my clinical skills learning objectives, for example the ones I want to learn first.	2 (1.3)	8 (5.2)	22 (14.4)	82 (53.6)	39 (25.5)	153(100.0)	3.99	.812
26	I know what strategies I can use in order to reach my learning goal, for example asking for feedback from the peers or practising the skill.	5 (3.3)	12 (7.8)	18 (11.8)	83 (54.2)	35 (22.9)	153(100.0)	3.87	.950
27	I can develop a learning plan to complete my learning task.	3 (2.0)	14 (9.2)	24 (15.7)	78 (51.0)	34 (22.2)	153(100.0)	3.84	.924
28	I am able to reach the deadlines in completing the learning objectives.	6 (3.9)	16 (10.5)	18 (11.8)	76 (49.7)	37 (24.2)	153(100.0)	3.79	1.025
29	I can identify human or material resources for accomplishing my learning tasks, for example clinical supervisors or simulation videos.	4 (2.6)	15 (9.8)	26 (17.0)	79 (51.6)	29 (19.0)	153(100.0)	3.76	.936
30	If there is something I have decided to learn I find time no matter how busy I am.	4 (2.6)	23 (15.0)	23 (15.0)	62 (40.5)	41 (26.8)	153(100.0)	3.70	1.011
31	I am able to follow my own learning plan.	7 (4.6)	19 (12.4)	25 (16.3)	72 (47.1)	30 (19.6)	153(100.0)	3.66	1.053
32	I can carry out a learning plan the way I have planned it.	7 (4.7)	19 (12.4)	34 (22.2)	68 (44.4)	25 (16.3)	153(100.0)	3.55	1.032
33	I have compiled an appropriate time management plan for learning clinical skills.	8 (5.2)	31 (20.3)	30 (19.6)	59 (38.6)	25 (16.3)	153(100.0)	3.41	1.118
34	I can easily organise my own time to independently practise the clinical skills.	15 (9.8)	24 (15.7)	26 (17.0)	62 (40.5)	26 (17.0)	153(100.0)	3.40	1.211
35	I can formulate my learning objectives for the skills I want to learn.	5 (3.3)	10 (6.5)	32 (20.9)	82 (53.6)	24 (15.7)	153(100.0)	3.27	.895
Overall Mean/ Standard deviation								3.65	0.997

NOTE: In the questionnaire SD, strongly disagree; D, disagree; DN, don't know; A, agree; SA, strongly agree. While \bar{x} , Mean; SD, Standard deviation

Item 25

A quarter of the 153 respondents (n=39; 25.5%) *strongly agreed* with their **ability to prioritise clinical skills learning objectives, for example the ones they wanted to learn first**. However, 22 (14.4%) of the respondents *did not know* how to prioritise their clinical learning objectives, for example the ones they wanted to learn first. This item had the highest mean value as well as the narrowest spread in relation to the mean score (\bar{x} =3.99; SD=.812) for items about planning and implementing of SDL. This implied that respondents' priority setting was intended to meet their learning objectives. According to Mackenzie and Nickerson, (2009), priority setting aims at making goal-accomplishment feasible for old and new goals alike. To an open question (Item 13), a respondent answered: *"I like it in the skill lab because I can learn on my own and even ask for help"*. However, one learner mentioned in response to Item 36: *"I do not do well with a schedule. It's better to plan in my head as working out a planner takes time"*. According to the respondents' perspective it seemed that learners had learning needs and were able to plan their learning process based on their preferences.

Item 26

More than three quarters (n= 118; 77.1%) of the respondents *agreed to strongly agreed* with **their knowledge of strategies to use in order to reach their learning goal, for example asking for feedback from the peers or practising the skill** (\bar{x} = 3.87; SD=.950). In accordance with adult teaching and learning principles, learners have a responsibility to develop strategies that would meet their learning objectives with the assistance of the faculty members (Billings & Halstead, 2009, p. 209). One respondent mentioned in answering Item 36 that it was important to *"practice when you can"* and another one stated *"not to be afraid to seek for*

help". Respondents' responses suggested the learners' awareness of and preferences for different learning strategies that could be employed in the skills laboratory.

Item 29

According to the basic assumptions of andragogy theory, adult learners are expected to identify and choose human or material resources to meet their learning objectives (Knowles, 1975). More than two thirds (n= 108; 70.6%) of the respondents *agreed* to *strongly agreed* about their **ability to identify human or material resources for accomplishing their learning tasks, for example clinical supervisors or simulation videos**(\bar{x} = 3.76; SD=.936). It seemed that simulated videos were not always available, since one respondent stated: "*I would like to have a chance to watch video as my self-directed learning*" (Item 36).

4.4.3.2 Developing a plan and time management (Items 27, 28, 30, 31, 32, 33and 34)

Item 27

Planning is important across a range of chores and it is one of the self-monitoring processes that occur in learners who self-direct their learning process (Sitzmann & Ely, 2011, p. 421). In the context of this study, it was anticipated that learners would be able to plan for their learning process. In this item, almost three quarters (n=112; 73.2%) of the 153 (100.0%) respondents *agreed* to *strongly agreed* about their **ability to develop a learning plan to complete their learning task** (\bar{x} =3.84; SD=.924). On the other hand, 41 (26.9 %) *strongly disagreed* with or *did not know* about their ability to develop a learning plan to complete their learning tasks.

Item 28

Li, Tancredi, Co and West (2010, p. 124) assert that successful learners set objectives that are specific, measurable, realistic, and linked to a timeline for completion. In relation to respondents' **ability to reach the deadlines in completing the learning objectives**, almost half (n=76; 49.7%) of the 153 (100%) respondents *agreed* and 29 (19.0) *strongly agreed* that they were able to reach the deadlines in completing the learning objectives (\bar{x} =3.76; SD 9.36).

A respondent, to an open question (Item36), stated: *"I really need some time to learn more things"* and *"I wish I could manage my time so that I can have equal amount of time for all my other modules"*. Despite most of the respondents indicating their ability to reach deadlines in completing the learning objectives, 40(26.2%) of the responses indicated *strongly disagreed* and *did not know* for the suggested item.

Item 30

According to Fengning (2012, p.223), implementation of plans requires an amount of commitment, time, and effort on the part of learner as well the facilitator. More than a quarter (n=41, 26.8%) of the 153 (100.0%) respondents *strongly agreed* that **if there was something they had decided to learn, they found time no matter how busy they were** (\bar{x} =3.70; SD= 1.011). Furthermore, almost one third (n=50; 32.6%) of the 153 (100%) respondents *strongly disagreed* and *did not know* whether there was something they had decided to learn for which they found time no matter how busy they were. Responses were more widely spread in relation to the mean value of 3.70 (SD= 1.011). A respondent, to an open question (Item36), stated: *"That with regards to bookings I make time no matter how busy I am"*. This response suggested that learners were committed and self-directed during their learning process.

Item 31

Only two thirds (n= 102; 66.7%) of the 153 (100.0%) respondents *agreed to strongly agreed* with their **capacity to follow their own learning plans** (\bar{x} = 3.66; SD=1.053). One third (n=51; 33.3%) of the respondents *strongly disagreed* with or *did not know* whether they had the capacity to follow their own learning plan. Regardless of how important planning is, it does not guarantee a change in learners' behaviour, since some may either fail to follow through with their set plan or to redirect their attention toward alternative goal pursuits. However, benefits are observed when the plans are being followed or implemented (Tyler-Smith, 2006, p.295). The significance of developing learning plans for SDL can only be achieved when learners implement the set plans for their clinical skills development. One respondent, to an open question (Item 12), mentioned: "*Booking is a cumbersome process, there is a lot of work to do, so booking and respecting time is often challenging*". Creating an enabling environment for SDL may ease the executions of the learners learning plans, like improving the clinical skill laboratory booking system.

Item 32

Similarly, less than two thirds (n= 93; 60.7%) of the 153 (100.0%) respondents *agreed to strongly agreed* with their **ability to carry out a learning plan the way they had planned it** (\bar{x} = 3.55; SD =1.032). In the same item, 60(39.3%) of the respondents *strongly disagreed* with or *did not know* of their ability to carry out a learning plan the way they had planned it. It appeared that a number of learners experienced challenges in accomplishing their planned learning objectives within a given period of time. One respondent, to an open question (Item 12), stated: "*It gives me hard time to be part and parcel of SDL because every time I find the*

book of booking is full". Despite other individual learners' challenges in accomplishing the planned learning objectives, it seemed that factors such inadequate space might not be facilitating SDL.

Item 33

Planning interventions enhance learning when the learners utilise the amount of time they had planned to devote to learning (Sitzmann & Johnson, 2012, p. 967). More than half (n= 84; 54.9%) of the 153 (100.0%) respondents *agreed to strongly agreed* with **compiling an appropriate time management plan for learning clinical skills**. More than one third (n= 59; 38.6%) of the 153 (100%) respondents *agreed* about their ability to compile appropriate time management plans for learning clinical skills. However, almost half (n= 69; 45.1%) of the respondents *strongly disagree* hat or *did not know* whether they knew how to compile appropriate time management plans, suggesting more negative responses with a mean value of 3.41 with a wide distribution in relation to the mean value (SD= 1.118). One respondent, to an open question (Item36), stated: "*I cannot organise my work and performance*".

Item 34

Mirzaei, Oskouie and Rafii (2012, p.51) assert that time management is dependent on students' personal motivation. The authors further argue that students place much importance on their academic duties when their goals lead them to accept the nursing field. Just more than half (n= 88; 57.5%) of the 153 (100.0%) respondents *agreed to strongly agreed* to their **ability to easily organise their own time to independently practise the clinical skills**. On the other hand, 65(42.5%) of the respondents *strongly disagreed* or *did not know* whether they had the ability to easily organise their time to independently practise the clinical skills. This item had the

widest distribution of responses from the mean value amongst items about planning and implementation (\bar{x} =3.40; SD=1.211). In response to an open question (Item 36), it was mentioned: *“I am not able to make time to go to SDL. Hope we can be given time to and perform skills at the skills lab”* and *“The time table does not allow you to do more practice”*. This suggested that not only did some respondents have challenges with time management but also experienced constraints in implementing SDL, possibly associated with allocation of time. Another respondent mentioned: *“It’s hard to do self-directed learning because there is always people, who are waiting or have booked already, must improve on the booking part”*.

Item 35

More than two thirds (n= 106; 69.3%) of the 153 (100.0%) respondents *agreed to strongly agreed* with having the **ability to formulate their learning objectives for the skills they wanted to learn** (\bar{x} =3.27; SD=.895). It is, however, concerning that 32 (20.9%) of the respondents *did not know* how to formulate their learning objectives. That was also indicated in the lower mean value of 3.27 (SD .895) of the item. Without intended outcomes in mind, it is unlikely that the learners can make progress with what they desire to learn. Learning objectives establish a focus for the learner on what he/she wants to learn and how to learn in order to be competent (Giles, 2011, p. 31).

In conclusion, respondents mostly agreed about their ability to plan and implement strategies to meet their learning goals. However, items where respondents indicated that they were lesser in agreement (less than 70%) related to the formulation of learning objectives (Item 35) and time management while executing their learning plans (Items 30, 31, 32, 33 and 34).

4.4.4 Interpersonal communication skills

This subdivision relates to the respondents' perceptions about their abilities to use interpersonal communication skills during SDL in the skills laboratory. The domain comprised seven (Items 35 – 41) that sought to elicit the respondents' perceptions (Table 4.5). For discussion purposes, reference is made to interactive communication (Items 38, 39, 41 and 43) and media of communication (Items 37, 40 and 42).

4.4.4.1 Interactive communication (Items 38, 39, 41 and 43)

Item 38

Far more than three quarters (n= 136; 88.9%) of the 153 respondents (100%) *agreed* to *strongly agreed* about their **ability to relate with their peers in seeking help concerning learning activities**. Responses were narrowly distributed around the mean value (\bar{x} =4.14; SD=.706). On the other hand, 17 (11.1%) of the respondents *strongly disagreed* with or *did not know* how to respond to the suggested item. The majority, in response to this item, showed to what extent learners valued peer interaction in their learning process. In response to an open question (Item 44), a respondent stated how peers could be assisted during learning activities: “*Communicate with everyone; you never know when [you] might need them*”. It can be interpreted that peers play a vital role in bridging the learning gaps while they are sharing experiences and knowledge about the clinical skills. The ability to share knowledge and seek help from peers can only be achieved with effective interpersonal communication skills. Studies have shown that peer teaching and learning are associated with an increase in learners'

confidence in clinical practice, improvement in the psychomotor and cognitive domains, and a decrease in anxiety (Secomb, 2008, p.703; Stone, Cooper & Cant online, 2013).

Table 4.5: Interpersonal communication skills

Item number	Interpersonal communication skills	Scale Frequency n (%)					Total n (%)	\bar{x}	SD
		SD n (%)	D n (%)	DN n (%)	A n (%)	SA n (%)			
37	I would like to learn the language or culture of the ones whom I frequently am interacting with.	2 (1.3)	5 (3.3)	5 (3.3)	55 (35.9)	82 (53.6)	153(100.0)	4.36	.850
38	I can relate to my peers in seeking help about learning activities.	2 (1.3)	5 (3.3)	10 (6.5)	94 (61.4)	42 (27.5)	153(100.0)	4.14	.706
39	My interaction with other people helps me to plan for further learning.	2 (1.3)	5 (3.3)	11 (7.2)	89 (58.2)	46 (30.1)	153(100.0)	4.13	.740
40	I am able to communicate messages effectively in writing.	2 (1.3)	8 (5.2)	19 (12.4)	73 (47.7)	51 (33.3)	153(100.0)	4.05	.891
41	Ordinarily, I am very calm in seeking help to achieve my learning objectives.	3 (2.0)	13 (8.5)	16 (10.5)	79 (51.6)	42 (27.5)	153(100.0)	3.95	.943
42	I am able to express messages effectively in oral presentation.	5 (3.3)	14 (9.2)	36 (23.5)	64 (41.8)	34 (22.2)	153(100.0)	3.70	1.000
43	I am able to relate with lectures/clinical supervisors in making appointments.	7 (4.6)	18 (11.8)	28 (18.3)	72 (47.1)	28 (18.3)	153(100.0)	3.64	1.031
Overall Mean/ Standard deviation								3.99	.880

NOTE: In the questionnaire SD, strongly disagree; D, disagree; DN, don't know; A, agree; SA, strongly agree. While \bar{x} , Mean; SD, Standard deviation

Item 39

A high positive response was obtained in this item. Well over three quarters (n=135; 88.3%) of the 153 respondents (100%) *agreed to strongly agreed* that their **interaction with other people helped them to plan for their further learning** (\bar{x} =4.13; SD=.740). Almost half of the respondents (n= 89; 58.2%) *agreed* that their interaction with other people helped them to plan for their further learning. One respondent, to an open question (Item 44), stated: “*It would be great to know few phrases or even to respond to someone in a different language*”. Conversing in other people’s languages may not only be significant for social purposes but it also enhances learning. The ability of learner nurses to use their interpersonal communication skills in SDL is assumed to have an impact on their improvement in clinical skills competence on the grounds that students who self-direct their learning seek help in order to improve the quality of their learning (Valle *et al.*, 2006, p.168).

Item 41

In this item that related to **calmness when seeking help to achieve learning objectives**, more than three quarters (n= 121; 79.0%) of the 153 (100%) respondents *agreed to strongly agreed* with the item (\bar{x} = 3.95; SD.943), signifying their positive perceptions. However, nearly one third (n= 32; 21%) of the respondents *strongly disagreed to did not know* about calmness being used when seeking help to achieve their objectives. It might be assumed that the negative perceptions about this item could have been due to the respondents being neophytes in nursing, as well as ineffective interpersonal relationships with the peers and the faculty alike. Calmness is important and positive student-instructor relationships can lower students’ anxiety and tension in achieving learning objectives (Cook, 2005).

Item 43

Almost two thirds (n=100; 65.4%) of the respondents *agreed to strongly agreed* with their **ability to relate with lectures/clinical supervisors in making appointments**. This item had the lowest mean value 3.64 (SD=1.031) amongst interpersonal communication skills items and with a wide distribution of responses in relation to the mean value. More than one third (n= 53; 34.7%) of the 153 (100%) respondents *strongly disagreed to did not know* about their ability to relate with lectures/clinical supervisors in making appointments. Negative perceptions about this item was concerning because lecturers and clinical supervisors involved in clinical education played a vital role in the students learning process. In response to an open question (Item 44), a respondent stated: *“If you want to book or need a supervisor for help only in or during practical time otherwise there is no time for them after normal time of practice”*. Unavailability of the lectures/clinical supervisors to provide support during SDL seems to create a gap in the student-faculty relation that would consequently affect the learning process. (Adib-Hajbaghery, Karbasi-Valashani & Heidari-Haratmeh, 2012, p. 94) assert that a positive student-instructor relationship has an impact on students’ learning and educational goal achievement. This relationship consequently encourages students’ academic help-seeking behaviour that could certainly have an impact on their success (Lee, 2007, p. 468).

4.4.4.1 Means of communication (Items 37, 40, and 42)

Item 37

In this item, the vast majority of respondents (n= 137; 89.5%) *agreed to strongly agreed* about the **need to learn the language or culture of people with whom they frequently interact**.

This item also had the highest mean value (\bar{x} = 4.36; SD=.850) among the items in this domain (interpersonal communication skills). Only 17 (10.5%) of the respondents indicated that they *strongly disagreed* to *did not know* how to learn the language of the people with whom they interacted. In response to an open question (Item 42), a respondent stated: “*I wish there was a module or a way to learn other languages, for example Xhosa and Afrikaans*” while another respondent stated, “*to get the option to learn another language*”. Learners need to learn languages or about the culture of people they interact with to achieve their own learning goals. Jooste (2010, p.208) emphasises that showing respect for other peoples’ cultures and learning essential aspects about other cultures, such as basic language, are important for effective communication. Furthermore, a willingness to learn about the other person’s culture builds a solid foundation for open and trusting relationships within which goals can be achieved.

Item 40

More than two thirds (n= 124; 81.0%) of the 153 (100%) respondents *agreed* to *strongly agreed* about their **ability to communicate messages effectively in writing** (\bar{x} = 4.05; SD=.891). However, 29 (18.9%) of the respondents *strongly disagreed* or *did not know* about their ability to communicate messages effectively in writing. According to the South African Qualifications Authority (2012), first year Level 5 learner nurses are expected to demonstrate the ability to communicate information reliably in either written or oral format. The ability to communicate effectively in writing may enable the learners to seek help and to make appointments for guidance about SDL in the skills laboratory.

Item 42

Almost two thirds, (n= 98; 64.0%) of the 153 (100%) respondents *agreed to strongly agreed* about their **ability to express messages effectively in oral presentation** (\bar{x} =3.70; SD= 1.000).

It is important to mention that 55(36%) of the respondents *strongly disagreed* or *did not know* about their ability to express messages effectively in oral presentation. These negative perceptions are not aligned with the expectation of the South African Qualifications Authority (2012) that first year Level 5 learner nurses should be able to demonstrate the ability to communicate information reliably in either written or oral format. In reaction to an open-ended question (Item 44), a respondent stated: “*Yes, sometime it is difficulty [sic]to me to explain what I am doing because of poor English and our supervisors sometime they need to understand our situation because we grow up in French system*”. This suggests that the language of instruction and communication have an impact on the learners’ learning process. Sommerville (2010) states that differences in home language and the language of instruction at tertiary level have an influence on learners’ performance.

In summary, most of the respondents had more positive responses (agreement) about their ability to use interpersonal communication skills during self-directed learning (Items 38, 39, 40, 41and 43). However, Items 42, and 43 that related to the ability to express messages effectively in oral presentation and relating with lectures/clinical supervisors in making appointments during SDL indicated lesser *agreed to strongly agreed* (less than 70%) responses.

4.5 CORRELATION OF THE FOUR DOMAINS

The total mean value for learning motivation was found to be the highest for SDL ($\bar{x} = 4.21$; $SD = .827$). This was followed by self-monitoring ($\bar{x} = 4.08$; $SD = .844$) and interpersonal communication skills ($\bar{x} = 3.99$; $SD = .880$). Planning and implementation obtained the lowest mean value ($\bar{x} = 3.65$), however, the widest distribution of responses in relation to the mean value ($SD = .997$) (Table 4.6).

Table 4.6: Total mean values and standard deviations for SDL domains

Domains	\bar{x}	SD
Learning motivation	4.21	.827
Self-monitoring	4.08	.844
Planning and implementation	3.65	.997
Interpersonal communication skills	3.99	.880

Note: \bar{x} = Mean, SD = standard deviation

These results may indicate challenges encountered by first year learner nurses during planning and implementation. Learners require empowerment for and guidance about planning and implementation of strategies intended to enhance their clinical skills development during self-directed learning when their nursing programme commences.

Table 4.7: Spearman's rho correlation of all four domains of the questionnaire

		Interpersonal communication skills	Learning motivation	Self- monitoring	Planning and implementation
Interpersonal communication skills	Correlation Coefficient	1.000	.411**	.426**	.449**
	Sig. (2-tailed)	.	.000	.000	.000
	N	153	153	153	153
Learning motivation	Correlation Coefficient	.411**	1.000	.449**	.436**
	Sig. (2-tailed)	.000	.	.000	.000
	N	153	153	153	153
Self- monitoring	Correlation Coefficient	.426**	.449**	1.000	.513**
	Sig. (2-tailed)	.000	.000	.	.000
	N	153	153	153	153
Planning/imple mentation	Correlation Coefficient	.449**	.436**	.513**	1.000
	Sig. (2-tailed)	.000	.000	.000	.
	N	153	153	153	153

NOTE: **Correlation is significant at the 0.01 level (2-tailed).

Table 4.7 summarises the relationships among the total scores of the four domains; namely learning motivation, self-monitoring, planning/ implementation, and interpersonal communication skills. The results indicate that there are significant positive correlations among the domains at a0.001 significant level with the correlation coefficients ranging from .426 – .513 and p-value of .000. These results suggest that when the respondents perceived themselves to be motivated, they would successively self-monitor their learning process, plan and implement learning strategies to bridge the identified learning gaps, and have an ability to utilise their interpersonal communication skills to enhance their own learning process.

4.6 CONCLUSION

This chapter presents the biographical and demographic information of the respondents, as well as the descriptive findings according to study objectives that relate to learning motivation, self-monitoring, planning and implementation, and interpersonal communication. This chapter concludes with a brief indication of correlations of the four domains on the topic of investigation.

CHAPTER FIVE

CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

5.1 INTRODUCTION

This chapter presents the conclusion of the analysed and discussed findings, highlights some recommendations, and outlines the study limitations.

The purpose of the study was to explore and describe the perceptions of the first year learner nurses about SDL in the skills laboratory during clinical activities at a School of Nursing in the Western Cape. Since the inception of the innovative clinical skills development method, learners' perceptions about the SDL component have not been explored. In order to elicit the learners' perceptions about the study phenomena the following objectives guided the study:

- explore and describe the perceptions of first year learner nurses about their motivation towards SDL during clinical activities in the skills laboratory.
- explore and describe the perceptions of first year learner nurses about their ability to monitor their SDL during clinical activities in the skills laboratory.
- explore and describe the perceptions of first year learner nurses about their ability to plan and implement SDL during clinical activities in the skills laboratory.
- explore and describe the perceptions of first year learner nurses about their ability to use interpersonal communication skills in self-directed learning during clinical activities in a skills laboratory.

5.2 CONCLUSIONS

The study respondents were predominately women (81%) while men comprised 19% of the total number of respondents. The gender composition suggests that nursing seems to be female dominated profession (Ozdemir, Akansel & Tunk, 2008; Wolfenden, 2011). Marginally more than half 79 (52.9%) of the 153 (100%) respondents were younger than or at least 19 years old. On the other hand, 74 (48.4%) of the respondents were 20 years old or older. The study sample was also comprised 22 (14.4%) of learners who had previously enrolled for the foundation programme and 131 (85.6%) were from a four-year programme.

The study employed simple random sampling to select the sample of the first year learner nurses who were pursuing a Bachelor's degree in nursing at a university in the Western Cape. Data was collected by means of self-administered five-point Likert scale questionnaires comprising 40 items in the format of closed-ended questions and an additional four open-ended questions. The 40 open-ended items were tested for internal consistency and found to be reliable for measuring the study constructs. Data analysis was conducted by using the SPSS version 21 statistical software program. Descriptive data analysis measures statistical concepts; such as frequencies, percentages, mean values, and standard deviation. These concepts and the measure of relationship between the four domains of the study objectives were presented in tables.

5.2.1 Learning motivation towards SDL

In relation to the perceptions of first year learner nurses about their motivation towards SDL during clinical activities in the skills laboratory, the study findings revealed that most of the respondents agreed with being motivated towards SDL (Items 2, 3, 4, 5, 6, 7, 11 and 12).

However, items where responses were less than 70% in agreement were related to viewing problems as challenges rather than obstacles (Item 8) and having self-confidence to perform a clinical procedure on their own (Item 9).

5.2.2 Self-monitoring of SDL

With regard to the perceptions of first year learner nurses about their ability to monitor their SDL during clinical activities in the skills laboratory, the study findings revealed that most of the respondents agreed about their ability to self-monitor themselves during SDL in the skills laboratory (Items 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 and 23). In all the items, more than (70%) of the respondents *agreed* to *strongly agree* with the suggested items. The findings indicated that the respondents seemed to identify their learning gaps and strategies, constantly monitored their learning gaps, and self-governed their learning process.

5.2.3 Planning and implementation of SDL

As far as the perceptions of first year learner nurses on their ability to plan and implement SDL during clinical activities in the skills laboratory were concerned, the study findings revealed that respondents mostly agreed about their ability to plan and implement SDL with the purpose of meeting their learning goals (Items 28, 29, 30, 31, 32 and 33). However, items where respondents indicated that they were lesser in agreement (less than 70%) related to the formulation of learning objectives (Item 35) and time management while executing their learning plans (Items 30, 31, 32, 33, and 34).

5.2.4 Interpersonal communication skills during SDL

In the instance of the perceptions of first year learner nurses about their ability to use interpersonal communication skills in self-directed learning during clinical activities in a skills laboratory, the study findings revealed that most of the respondents agreed about their ability to use interpersonal communication skills during SDL (Items 35, 36, 37, 38 and 39). However, items that related to the ability to express messages effectively in oral presentation (Item 42) and relating with lectures/clinical supervisors in making appointments during SDL (Item 43) showed limitations.

5.3 RECOMMENDATIONS

For purpose of this study, items where respondents indicated less than 70% agreement were identified as challenges to be addressed during SDL in the skills laboratory. Therefore, the recommendations are based on identified challenges from closed-ended items, as well as open-ended questions about practice in the skills laboratory, at nursing education institutions, and for further research.

5.3.1 Recommendation for SDL practice in the skills laboratory

- The clinical supervisors/educators should direct the minds of learners to believing that the experience of problems leads to growth because we are all expected to solve problems in our everyday and professional lives. Jonassen (2011) suggests that educators have to assist learners with learning to solve the problems they face in their professional lives, since the ability to approach problems positively depends on past experience, expertise, and view of self. Furthermore, by acting as role models in the successful

management of problems, learners could start viewing problems as positive opportunities, and not as obstacles, to enrich their own problem solving competencies.

- Perry (2011, p. 218) viewed self-confidence as critical for future healthcare profession, since it plays a vital role in competence development and skills mastery. Therefore, facilitators should develop a belief in every learner as a winner. When learners are acknowledged for positive attempts, for example when conducting procedures, they will start to believe in themselves more; it leads to building self-confidence. Other strategies to build learners confidence are to encourage them to use simulation opportunities in the skills laboratory. Simulation has shown to significantly improve learner nurses' self-confidence (Lewi & Ciak, 2011, p. 256; Blum, Borglund & Parcels, online, 2010).
- Tenets of adult learning suggest that learners should be able to compile a framework for their own learning objectives (Knowles, 1975). The inability to formulate learning objectives raises concern about the extent to which the learners direct their learning, focus on specific learning needs, and play an active role during their learning process. For this reason, the facilitators should empower the learners to formulate their own learning objectives. By making use of learning contracts, learners could learn how to formulate their learning objectives based on their self-identified learning needs. Learning contracts develop self-directedness in acquiring knowledge and skills, and exercise control in one's learning experiences (Mohammed, 2010, p.17; Rye, 2008, p.1475).
- Effective time management is a central requirement for academic success (Kaya, Kaya, Pallos & Küçük, 2012, p.287; George, Dixon, Stansal, Gelb & Pheri, 2008, p. 706). It is imperative that facilitators empower the learners with time management skills when they begin their nursing programme. In line with the present study findings, other studies have

revealed that learners struggle with time management in their first year at university (Van der Meer, Jansen & Marjolein, 2010; p.777; Yorke & Longden online, 2007, p. 41). In view of the cited findings, Van der Meer and colleagues suggest that teaching and other supporting staff members should play an active role in helping first year learners to make sense of the expectations related to time management and self-study.

- There is a need for facilitators to support and guide learners while they are striving to adjust to the language of instruction. Studies have shown that home language and language of instruction at tertiary level have an influence on learners' academic performance and learning process (Singaram, van der Vleuten, Muijtjens & Dolmans, 2010, p.154; Sommerville, 2010; Engelbrecht & Wildsmith, 2010).
- A good interpersonal relationship between facilitators and learners accelerates learning and correlate significantly with academic achievement (Hickey, 2010, p.40; Al-Hussami, Saleh, Hayajneh, Abdalkader & Mahadeen, 2010, p. 235). Therefore, the facilitators should display approachable, caring, and respectful attitudes towards the learners in order to create a psychological environment that enables learners to seek assistance during their clinical skills development.

5.3.2 Recommendations for nursing education institutions

- In opened-ended questions, a number of comments highlighted perceived challenges in easing implementation of SDL; such as inadequate space to accommodate a large number of learners, not enough time available for practice, and lack of mentorship when they were practising the skills (Annexure F). Therefore, measures should be taken to enhance the SDL in the skills laboratory.

- The curriculum should pay more attention to the development of interpersonal communication skills when learners are enrolled in the nursing programme.
- Identify learners who experience challenges with English as the language of instruction when they are registered for the programme in order to timely implement supportive measures.

5.3.3 Recommendations for further research

- Further research should focus on the learners preferred mode of support for enhancing SDL in the skills laboratory.
- Assess the learners' readiness for SDL in their clinical skills development when they start their nursing programme in order to timely address the identified areas of concern.
- The researcher further recommends a qualitative study that explores in-depth experiences of learners across different nursing year levels. The open-ended questions used in this study could not sufficiently evoke a deeper understanding of the study phenomena.

5.5 LIMITATIONS

The study was limited to only the first year level of a nursing programme. More comprehensive findings could have been obtained about learner nurses perception of SDL in the skills laboratory if all four levels were included. Furthermore, the approach employed in the current study did not elicit an in-depth understanding of the phenomenon due to the research design.

5.6 SUMMARY

This study provides an insight into the first year learner nurses' perceptions about self-directed learning during clinical activities in the skills laboratory. The findings revealed that most of the respondents perceived self-directed learning in the skills laboratory positively. A significant positive relationship was observed between learning motivation, self-monitoring, planning and implementation, and interpersonal communication skills. These results suggested that when the respondents perceived themselves to be motivated towards SDL they would successively self-monitor their learning process, plan and implement learning strategies to bridge the identified learning gaps, and have an ability to utilise their interpersonal communication skills for enhancing their own learning process.

However, it was clear that the domain that related to planning and implementation was the least frequently positively perceived, specifically in relation to time management for adhering to the planned schedules of self-directed learning. The institution, as well as the lecturers and clinical supervisors, should provide a conducive environment to facilitate SDL. Fostering SDL in clinical skills acquisition would significantly prepare prospective nurses for the lifelong learning that is required in a constantly changing healthcare system.

Acknowledgement

Sipiwe Muzizi Mulube would like thank Center for Teaching and Learning Scholarship (CENTALS) for their financial contribution towards this research project.

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Annexure A: University Ethical Clearance



OFFICE OF THE DEAN DEPARTMENT OF RESEARCH DEVELOPMENT

15 April 2013

To Whom It May Concern

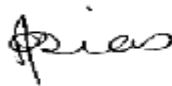
I hereby certify that the Senate Research Committee of the University of the Western Cape has approved the methodology and ethics of the following research project by:
Mrs MS Mulube (School of Nursing)

Research Project: First year learner nurses' perceptions on self-directed learning during clinical activities in a skills laboratory.

Registration no: 13/3/15

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

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



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

Private Bag X17, Bellville 7535, South Africa
T: +27 21 959 2988/2948 . F: +27 21 959 3170
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a place to grow, from hope
to action through knowledge

Annexure B: Permission letter from the Director of Nursing



UNIVERSITY OF THE WESTERN CAPE

17, Bellville 7535, South Africa
Tel: +27 21-9592274, Fax: 27 21-9592679
E-mail: kjooste@uwc.ac.za

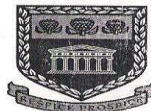
24 April 2013

The School of Nursing gives permission to Ms SM Mulube (2838386) to conduct her research data collection on the topic First year learner nurses perceptions on self directed learning during clinical activities in the skills laboratory for the period April to August 2013.

We wish you well on your journey.

Prof O Adejumo

Post graduate studies



**UNIVERSITY of the
WESTERN CAPE**

A place of quality, a place to grow, from hope to action through knowledge

Annexure C: Permission Letter to the University



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-9592274, Fax: 27 21-9592271

E-mail: sipibusi@gmail.com

Head of School of Nursing

REQUESTING PERMISSION TO CONDUCT A RESEARCH STUDY IN THE UNIVERSITY

I hereby request to conduct a research study in the School of Nursing. The study is entitled: *First year learner nurses perceptions on self-directed learning during clinical activities in a skills laboratory*. This study is part of the requirements for obtaining a Master in nursing education. The study will be done under the supervision and guidance of Professor K. Jooste of the School of Nursing, University of The Western Cape.

The respondents of the study will be first year learner students. Data collection will be achieved by a self-administered questionnaire. The respondents will be asked to complete the questionnaires which will take 30 minutes of their spare time and have them returned in a closed envelop that will be provided. The rights to privacy, confidentiality and anonymity will be adhered during the study process. Code numbers will be assigned to the questionnaires to ensure respondent's identification is kept secret. The name of the University will not be included in the study findings. The records of the study will be kept under lock and key for 5years after publication of the findings then will it be destroyed. The data will only be the accessible to the supervisor; researcher and statistician. There will be no form of coercion into the participation and if they decide to withdraw from the study their rights will be respected.

The researcher will ensure that highest standards of research planning, implementation and reporting are followed.

Should you have any question about the research study itself, please contact:

Sipiwe Muzizi Mulube

P.O.BOX 60986

Livingstone

Zambia

Cell: 0785721811

E-mail: Sipibusi@gmail.com

Annexure D: Information Sheet



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-9592274, Fax: 27 21-9592271

E-mail: sipibusi@gmail.com

INFORMATION SHEET

Project Title: First year learner nurses' perceptions on self-directed learning during
Clinical activities in the skills laboratory

What is this study about?

My name is Sipiwe Muzizi Mulube, I am currently registered for a Master programme in nursing education at the University of the Western Cape, and I am doing my research under the supervision of Prof K Jooste. I am inviting first year Bachelor learner students at the University of the Western Cape to participate in the research study specified above. The purpose of this study is to explore and describe the perceptions of first year learner nurses on self-directed learning during clinical activities in the skills laboratory

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

If you agree to participate in the study, you will be requested to complete the handed out questionnaire that will take 30 minutes to complete at your own time and have it returned in a closed envelop that will be provided. Then, the researcher will collect the completed questionnaires and place them in a secure place under lock and key for five years after the results have been published. Only the researcher, the supervisor and the statistician will have access to the data collected.

Would my participation in this study be kept confidential?

All the personal information and responses in the questionnaire will be kept in a secure place for five years after the results of the research have been published. The questionnaires will

remain anonymously numbered to prevent linking the responses with your personal identification. In order to maintain confidentiality, the researcher will not mention your names or the name of the institution in the publication of the research findings.

What are the risks of this research?

There are no known risks associated with participating in this research project.

What are the benefits of this research?

The results will not benefit you directly, but the findings of the study will be useful to nursing schools with the purpose of enhancing self-directed learning during clinical activities in the skills laboratory.

Am I obliged to take part in this research project and can I stop participating at any time?

Your participation in this study is voluntary and you are free to withdraw at any stage of the study without penalty or compromising your academic study. You may decide not to participate in the study at all with no repercussion.

How do I get my questions answered?

You are free to ask any question pertaining to the study or your participation. The following are my contact details.

Sipiwe Muzizi Mulube
School of Nursing
University of the Western Cape
Private Bag X17
Bellville 7535
Cell Phone: 0785721811
Email: Sipibusi@gmail.com

You have rights as respondents to ask any question related to the study or report any problem encountered during the study. Therefore, should you have any question or problems that needs to be addressed, do not hesitate to contact the following;

Head of Department

Prof KarienJooste (021)959-2274

Email: - kjooste@uwc.ac.za

Dean of the Faculty of Community and Health Sciences

Prof Jose Frantz 021 9592631 Email: jfrantz@uwc.ac.za

University of the Western Cape

Private Bag X17

Bellville 7535

Head of Department

Prof K Jooste

University of the Western Cape

Private Bag X17

Bellville 7535

This research has been approved by the Senate Research Committee and Ethics Committee of the University of the Western Cape.

Annexure E: Written Informed Consent Survey



UNIVERSITY OF THE WESTERN CAPE

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Tel: +27 21-9592274, Fax: 27 21-9592271

E-mail: sipibusi@gmail.com

INFORMED CONSENT FORM

Title of Research Project: First year learner nurses' perception on self-directed learning during clinical activities in the skills laboratory

I confirm that I have read and understood the information on the above study and the given description of the study is in the language that I easily understand. I had the opportunity to ask questions related to the study. I therefore, decide to take part in the study and understand that my participation is voluntary and confidentiality will be maintained. I am free to withdraw at any time from the study without any penalty or effect on my studies.

Respondent's name.....

Respondent's signature.....

Witness.....

Date.....

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

Study Coordinator's Name: Prof Karien Jooste

University of the Western Cape

Private Bag X17, Belville 7535

Telephone: (021)959-2274

Cell: 0828972228

Fax: (021)959-2271

Email: kjooste@uwc.ac.za

ANNEXURE F: QUESTIONNAIRE



UNIVERSITY OF THE WESTERN CAPE
Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-9592274, Fax: 27 21-

E-mail: sipibusi@gmail.com

Title of Research Project: *First year learner nurses' perceptions on self-directed learning during clinical activities in the skills laboratory*

Instructions:

Mark X in the response box to indicate your answer:

SECTION A: BIOGRAPHICAL AND DEMOGRAPHICAL INFORMATION

1.

Gender	
Male	
Female	

2.

Age	
Less than 19 years	
19 years	
20 years	
21 years	
22 years	
23 years	
More than 23 years	

3. Home language

English	Afrikaans	Zulu	Xhosa	Sotho	Pedi	Tswana	Swati	Ndebele	Tsonga	Venda	Other
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4.

Have you been on the foundation programme before starting the 4 year degree?	Yes
	No

SECTION B

This section attempts to find out about your perceptions on self-directed learning in the skills laboratory. Indicate with (X) to what extent you agree with the statements.

Use the following scale: 1= strongly disagree, 2 = disagree, 3= I don't know, 4= Agree, 5=strongly agree

Item number	1. <u>LEARNING MOTIVATION</u> To what extent do you perceive your motivation towards self-directed learning in the skills laboratory?	1	2	3	4	5
		1	I find learning important because it enables me to further my understanding of a procedure			
2	I know I am responsible for my learning process					
3	I love to learn about new clinical nursing skills					
4	I find learning interesting because it gives me new ways of looking at the world of nursing					
5	I like to learn because I want to gain skills in caring for patients					

6	My successes in the programme inspire me to continue learning.					
7	I learn the clinics skills to avoid failure.					
8	I view problems as challenges, not obstacles.					
9	I am self-confident to perform a clinical procedure on my own.					
10	I have a curious mind that makes me learn about different things in the skills laboratory that are new.					
11	I am persistent in learning the clinical skills I don't have.					
12	<p>Do you have any other comments on your motivation towards self-directed learning in the skills laboratory?</p> <p>.....</p> <p>.....</p>					

	2. <u>SELF-MONITORING</u>	1	2	3	4	5
	To what extent do you perceive your ability to self-monitor your self-directed learning in the skills laboratory?					
13	There are so many things I want to learn that I wish I had the time for.					
14	If there is something I want to learn, I can figure out a way to learn it.					
15	I can identify my own learning needs.					
16	I gladly accept feedback about my performance.					
17	I can assess my learning objectives if they have been achieved.					
18	I understand the strengths or weaknesses of my clinical skills.					

19	I can closely observe my learning process by marks or feedback.					
20	I understand myself as an independent learner.					
21	I know what I want to learn, for example search for specific information about clinical skills.					
22	I know how I learn best, for example with my fellow peers or watching a video.					
23	I continuously monitor my learning process by checking my feedback on procedures performed.					
<p>24</p> <p>Do you have any further comments on your ability to self-monitor your self-directed learning in the skills laboratory?</p> <p>.....</p> <p>.....</p>						

	3. <u>PLANNING AND IMPLEMENTATION</u>	1	2	3	4	5
	To what extent do you perceive your ability to plan and implement self-directed learning in the skills laboratory?					
25	I prioritize my clinical skills learning objectives, for example the ones I want to learn first.					
26	I know what strategies I can use in order to reach my learning goal, for example asking for feedback from the peers or practicing the skill.					
27	I can develop a learning plan to complete my learning task.					
28	I am able to reach the deadlines in completing the learning objectives.					
29	I can identify human or material resources for accomplishing my learning tasks, for example					

	clinical supervisors or simulation videos.					
30	If there is something I have decided to learn I find time no matter how busy I am.					
31	I am able to follow my own learning plan.					
32	I can carry out a learning plan the way I have planned it					
33	I have compiled an appropriate time management plan for learning clinical skills.					
34	I can easily organize my own time to independently practice the clinical skills.					
35	I can formulate my learning objectives for the skills I want to learn.					
36	<p>Do you have any comments on your ability to plan and implement self-directed learning in the skills laboratory?</p> <p>.....</p> <p>.....</p>					

	4. <u>INTERPERSONAL COMMUNICATION SKILLS</u>	1	2	3	4	5
	To what extent do you perceive your ability to use interpersonal communication skills on self-directed learning in the skills laboratory?					
37	I would like to learn the language or culture of the ones whom I frequently am interacting with.					
38	I can relate to my peers in seeking help about learning activities.					
39	My interaction with other people helps me to plan for further learning.					
40	I am able to communicate messages effectively in writing					

41	Ordinarily, I am very calm in seeking help to achieve my learning objectives					
42	I am able to express messages effectively in oral presentation					
43	I am able to relate with lectures/clinical supervisors in making appointments.					
<p data-bbox="240 487 272 520">44</p> <p data-bbox="191 550 1328 613">Do you have any further comments on your ability to use interpersonal communication skills on self-directed learning in the skills laboratory?</p> <p data-bbox="191 655 1383 676">.....</p> <p data-bbox="191 688 1357 709">.....</p>						

Thank you for your participation in this study!

ANNEXURE G: Open-ended responses (not all included in report due to scope of thesis)

Learning motivation

“I like it in the skill lab because I can learn my own and even ask for help”

“Not enough emphasis is put on self-directed learning and there is not much of supervising, the learners do not always do the right thing”

“It allows you to make your own mistakes and be able to fix them without someone telling you”

“I have a problem that we have so little chances to go and it is always full when we want to make a booking”

“No comments, I am satisfied with all the information provided below”

“Give us more guided practices and not just show us and then come to assess us”

“For me they must make more time for the 1st years in the lab”

“I wish we could have extended time for the SDL to improve our skills”

“It is good but if we go to the hospital for practice it will be much better because we have few hours to practice”

“I think the university needs a bigger skills lab which can accommodate a lot of students”

“Booking is a cumbersome process, there is a lot of work to do, so booking and respecting time is often challenging”

“It gives me hard time to be a part and parcel of SDL because every time I find the book of booking is full”

“It is very important because it helps a lot that is practice makes perfect”

“There must be more people to give us guidance on not get irritated when we don't know some stuff”

“Yes, the 1 hour is not enough to do the procedure”

“It is really nice. It prepares me for the evaluation with my supervisors”

“If you practice more you do it perfectly”

Yes, there are things that are different from what we doing at hospital and end up confused”

“SDL is good and am learning a lot but I wish when doing procedure were are supervised”

“May be get someone to assist you and show you the procedure because you could be practicing the wrong way”

“I think it is not that perfect because we face real people like in hospital”

“May be bigger skills lab would be beneficiary for all students because getting an appointment for SDL is difficult”

“The lecture also gives us additional experiences that they had to go through or overcome”

“Bookings are difficult as there are many of us”

“They do not always have the necessary equipment needed to perform certain skill procedure, or if they do some are broken or damaged”

“Skills lab help you to become competent, the problem that may occur is that it is totally different to real work”

“It is unnecessary to give us extra self-directed learning time that we have to complete if we practiced in the time it was demonstrated to us and feel competent. I feel that it should be allowed to sign off self-directed learning”

“Even though I learn things in the skills lab, I think that clinical supervisor’s needs to pull up their socks and stop sitting around and taking their time like their needs are more important than ours”

“When I am going there to fill my name for a procedure, it is always full.”

“Booking is always full and we do not get time to attend SDL”

“I wish the bookings were not so full for SDL”

“It is not easy to learn in the skills lab because you find that when you get there it is fully booked and we do not get a chance for instance, I only went there once only”

“I think when doing self-directed learning there must be someone to guide me, if I am doing the right thing”

“I helped me to understand more the theory of nursing (fundamentals of nursing)

“As I have not been there like the way I want, it’s giving me difficult time because I cannot manage my time well”

“To get my hours in”

“The skills laboratory is very difficult to get a booking because it is always fully booked”

“It’s hard to do self-directed learning because there is always people who are waiting or have booked already, must improve on the booking part”

Self-monitoring

“The time table does not allow you to do more practice”

“I cannot organize my work and performance”

“I really need some time to learn more things”

“I wish I could manage my time so that I can have equal amount of time for all my other modules”

“I don’t understand some procedures and I find no one to explain to me”

“After I have done SDL and have been evaluated I need to go back and look what I did wrong”

“I want to learn on real patients like in hospital”

“For supervisors to check on us during SDL”

“ Being on my own in the skills lab gives me time to understand and get what my mistakes are, but it also gives pressure when you not sure”

Planning and implementation

“I think we have little time to learn all the things that are expected of us”

“I am not able to make time to go to SDL. Hope we can be given time to and perform skills at the skills lab”

“I do not do well with a schedule. It’s better to plan in my head as working out a planner takes time”

“I would like to have a chance to watch video as my self-directed learning”

“Skills lab always busy, they do not have enough time to monitor students, when you always use book, no place”

“They should give us more bookings even lunch break”

“Practice when you can”

“Not to be afraid to seek for help”

“That with regards to bookings I make time no matter how busy I am”

“Yes because we can book in lab skills and when we go there no time for us, there is time for students for 2nd year and 3rd year”

“The line to enter or get a booking is difficult”

“The times available to us to practice are not always open or are suitable to us”

“I feel that there is no space for people who are fast learners, I know a skill needs to be practiced to feel competent but I find it more effective to practice on real patients. That is only when I feel competent and I find that they focus too much on self-directed learning and we waste time. They could rather give us extra hospital time”

Interpersonal communication

“It you want to book or need a supervisor for help only in or during practical time otherwise there is no time for them after normal time of practice”

“Communicate with everyone you never know when might need them”

“I wish there was a module or a way to learn other language e.g. xhosa and Afrikaans”

“Yes sometime it is difficulty to me to explain what I am doing because of poor English and our supervisors sometime they need to understand our situation because we grow up in French system “

“It would be great to know a few phrased or even to respond to someone in a different language”

“I want to learn more, but we get too little time to do all the work at once”

“To get the option to learn another language”

“I would really like to learn xhosa as of most of the patients’ language is xhosa”

ANNEXURE H: Editor's letter



* The stars that tell the spade when to dig and the seeds when to grow *
* Isilimela – iinkwenkwezi ezixelela umhlakulo ukuba mawembe nembewu ukuba mayikhule*

P O Box 65251
Erasmusrand
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14 November 2013

Dear Sipiwe Muzizi Mulube

CONFIRMATION OF EDITING YOUR DISSERTATION WITH THE TITLE FIRST YEAR LEARNER NURSES' PERCEPTIONS ON SELF-DIRECTED LEARNING DURING CLINICAL ACTIVITIES IN THE SKILLS LABORATORY, EXCLUDING ANNEXURES

I hereby confirm that I have edited the abovementioned dissertation as requested.

Please pay particular attention to the editing notes AH01 to AH142 for your revision.

The tracks copy of the document contains all the changes I have effected while the edited copy is a clean copy with the changes removed. Kindly make any further changes to the edited copy since I have effected minor editing changes after removing the changes from the tracks copy. The tracks copy should only be used for reference purposes.

Please note that it remains your responsibility to supply references according to the convention that is used at your institution of learning.

You are more than welcome to send me the document again to perform final editing should it be necessary.

Kind regards

Andre Hills
083 501 4124