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**STUDENTS' PERSPECTIVES ON THE PRIMARY
HEALTH CARE PRACTICE LEARNING
ENVIRONMENT**

by

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*Submitted in fulfilment of the requirements in respect of the degree
Master of Social Science in Nursing in the School of Nursing
In the Faculty of Health Sciences
At the University of the Free State*

The submission date: February 2018

Supervisor: Prof A. Joubert

DECLARATION

I, Soyi Joyce Mosia, hereby declare that the dissertation on the Students' Perspectives on the Primary Health Care Practice Learning Environment submitted to the University of the Free State for the qualification, Master of Social Sciences in Nursing, is my original work and has not been previously submitted to any other university for the same qualification.

I, Soyi Joyce Mosia hereby declare that I am aware that the copyright is vested in the University of the Free State.

I, Soyi Joyce Mosia hereby declare that all my royalties regarding intellectual property that was developed during the course of and/or in connection with the study at the University of the Free State, will accrue to the University

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LETTER FROM EDITOR



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Letter of Editing

This report serves to state that the dissertation submitted by Soyi Joyce Mosia, in fulfillment of the requirements for the degree Master of Social Science in Nursing has been edited.

The dissertation was edited for errors in syntax, grammar, punctuation and the referencing system used.

The edit will be regarded as complete once the necessary changes have been effected and all of the comments addressed.

Thank-you for your business.

A handwritten signature in black ink that reads "P. Fogg". The signature is written in a cursive, slightly slanted style.

Pauline Fogg

ACKNOWLEDGEMENTS

I would like to express my heartfelt gratitude to:

- My supervisor, Professor Annemarie Joubert, for her continuous guidance and support, her invaluable insight she shared with me and her encouragement during this project. It was such an honour to have a great supervisor like her.
- The biostatistician, Mr Cornel Van Rooyen, for analysing data and explaining the results so well.
- My sons, Mojalefa and Teboho, for their love and continuous, unconditional support and showing confidence in me.
- My mother, for her patience and understanding when I was not always available to assist her, when she needed my attention. Her prayers gave me the strength to keep on going when I was feeling down.
- FSSoN -Eastern Campus management, Mrs Mokoena Mvandaba M.M and Ms Mamabolo L.M, for encouraging me to persevere and sharing good experiences with me.
- My colleagues, Mr Matuka M.J and Mrs Mosia D.K.J. for their continuous encouragement and support. I am glad that we all managed to finish this journey.
- Melanie Pienaar, UFS 3rd year lecturer, for her assistance with a questionnaire pre-test.
- FSSoN CNT 3rd year lecturers, for their assistance with data collection.
- FSSoN students for their participation in the project.
- My colleague and friend Mrs Moloji M.E, for her constant monitoring, prayers and encouragement.
- Ilsè Lourens for language editing.
- Riona Delpont and Cecilna Grobler for the technical editing of the final document.

SUMMARY

Primary Health Care (PHC) practice environments provide unique opportunities for students to learn clinical skills and acquire professional competence. To enhance clinical learning, the PHC practice learning environment must be supportive to the students' learning needs and also for professional nurses to educate students. The researcher's interest to conduct this study was raised by the negative feedback received from students and their supervisors, following the students' required primary healthcare clinical placement. The study focused on the views of the students regarding the PHC practice learning environment, as they are at the centre in clinical practice.

The aim of the study was to describe the primary healthcare practice learning environment from the students' perspective. The description of the students' perspectives on the primary health care practice learning environment could help improve the supportive relationship between the Free State School of Nursing, the Primary Health Care (PHC) clinical facilities and the students, and consequently enhance clinical learning. A quantitative, descriptive, cross-sectional design was followed to describe the perspectives of student nurses. The study population consisted of the 3rd year students from the Eastern, Northern and Southern campuses of a Free State School of Nursing, who completed their second year primary health care clinical practice in 2016.

A structured self-administrative questionnaire was developed from MacKenzie's (2010) qualitative study on the problems of undergraduate student nurses' learning experiences in primary healthcare clinics and relevant literature to collect data. A total number of 146 students voluntarily completed the questionnaire. Descriptive statistics were used to analyse data.

The results showed that the students were mostly supported before clinical placement, on the commencement of clinical placement and during clinical placement. However, the percentage of positive responses received during clinical

placement was lower than that of the support received before and on the commencement of clinical placement. Furthermore, the respect professional nurses showed towards patients and their families, the relationships students had with other members of the multidisciplinary team, communication between lecturers and professional nurses, the availability of human and material resources all needed much improvement. On a positive note, the services at PHC practice learning environments were found to be adequate. A comparison of certain statements between the three campuses showed that Campus C students responded positively in most statements. On the whole, the finding of this study shows that the PHC practice environments do not adequately support students' clinical learning. The Campus C PHC practice learning environment was found to better enhance the students' clinical learning, than the Campus A and B practice learning environments.

Recommendations that were made based on the results of this study included the adequate preparation of professional nurses by the lecturers before clinical placement. To improve supervision during clinical placement, preceptorship and mentorship programmes were recommended. Furthermore, creating a practice learning environment that nurtures clinical learning (good role modelling by professional nurses; the approachable attitude of nurses towards students and the providing of a high standard of care by professional nurses) could benefit students. The effective communication between lecturers and professional nurses is crucial to enhance clinical learning. The researcher therefore, suggests that future research focuses on the development and implementation of relevant/collaborative clinical practice environment programmes and assessment tools.

Key terms: Student nurses, Primary health care, Practice learning environment, learning atmosphere, Clinical learning

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CHAPTER 1

OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Practice learning environments play a critical, irreplaceable role in the nursing profession. In the practice learning environment, nursing students should receive practical / clinical learning (Aktas & Karabut, 2016:128). Clinical learning exposes student nurses to the realities of their function in clinical practice (Curtis, 2011:8, 9; Henderson & Tyler, 2011:289; Pitt, Powis, Levett-Jones & Hunter, 2012:903, 910; Austria, Baraki & Doig, 2013:1). Legally, clinical learning is a requirement to guarantee the capability to practice as a nurse, as it assists the students to acquire clinical competence (Hakimzadeh, Ghodrati, Karamdost, Ghodrati & Mirmosavi 2013:728; Bjork, Berntsen, Brynildsen & Hestetun, 2014:2958). Unlike theoretical learning, clinical learning is a complex process as it occurs in a multifaceted context, which is challenging to students (AlHaqwi, Kuntze & Van der Molen, 2014:2; Bos Alinaghizahdeh, Saarikoski & Kaila, 2015:170) (refer to Figure 1.1). Therefore, health care practice environments should contribute to the clinical learning of nursing students and enable them to gain clinical and professional competence (Siggins Miller Consultants, 2012:3).

South African Nursing Council (SANC) [n.d.]:24) states that Nursing Education Institutions (NEIs) should have accredited clinical facilities, which promote quality learning and the education of students. The Nursing Education Stakeholders (NES) group (2012) supports the SANC by stating that nursing students should only be placed in identified practice environments, where the quality of nursing care based on clearly defined standards, is observed. Conducive practice environments are necessary to enable nursing students to integrate theory into practice and learn optimally, as they interact and share knowledge with professional nurses (Kaphangawani & Useh, 2013:182). However, practice learning environments where nursing students are placed do not always meet these requirements.

As a matter of fact, globally, the state of the economy remains a barrier and health care environments, and consequently professional nurses in the clinical practice, are faced with significant challenges, which compromise not only the standard of care, but also the students' clinical learning (Papathanasiou, Tsaras & Sarafis, 2014:58). South Africa is equally affected by these challenges, which impact negatively on the practice learning environment. Ultimately, learning through practice should be enhanced when these environments support professional nurses to educate students (Henderson & Tyler, 2011:288). The need for Nursing Education Institutions (NEIs) and the practice learning environments to have successful partnerships, with clear expectations to assist students to learn optimally, and consequently improve clinical competence, is imperative (Emmanuel & Pryce-Miller, 2013:19; Niederhauser, Schoessier, Gubrud-Howe, Magnussen & Codier, 2012:2). In this study the researcher will focus on the student nurses' perspectives and views regarding the primary health care practice environment.

1.2 BACKGROUND

Student nurses are expected to demonstrate high levels of knowledge, understanding and the application of theory into practice, and to function independently as professional nurses (Mampunge, 2013:55). However, Kaphagawani and Useh (2013:182), and Bruce (2013:7) state that a gap in integrating theory and practice still exists and that it has been a challenge for a long time in nursing education.

The Department of Health (DoH, 2012:21), Kaphagawani and Useh (2013), as well as Bruce (2013) all indicate, that research on the ability of newly qualified nurses to practice independently in different settings, showed that students do not apply certain theory in clinical situations, including primary health care. Furthermore, hospital settings are preferred by newly qualified nurses as compared to primary healthcare settings, where professional nurses are mostly responsible for service delivery (Koterea & Matsuda, 2015:26). Against this background, the researcher questioned the conduciveness of primary health care practice environments to promote effective clinical learning and to enhance the confidence of newly qualified professional nurses to work independently in these health care settings.

1.3 PROBLEM STATEMENT

Unfavourable working conditions in health care clinical practice environments in South Africa do not only affect patient care, but also the quality of clinical training and the exposure of student nurses to appropriate learning opportunities (DoH, 2012:26). The Free State Province is equally affected by these unfavourable conditions. Lecturers, professional nurses and students are concerned about insufficient clinical learning of the students during their clinical placements in the Free State primary healthcare practice environments. Lecturers are concerned about the quality of clinical practice environments, where students and professional nurses are not able to utilise teaching and learning opportunities effectively. The need to conduct research became evident from the feedback received during clinical meetings between the different campuses and clinical areas, and the students' clinical placement evaluation reports. Professional nurses frequently report the attitudes of students and unsupportive clinical environments, which weaken their ability to educate the students. Students often report the negative attitude of professional nurses towards them and the clinical environment, which does not enhance the application of the theory into practice and consequently their ability to learn. In a qualitative study conducted by MacKenzie (2010) on the problems of the undergraduate student nurses' learning experiences in primary health care clinics, the students highlighted the negative attitudes of professional nurses and the unsupportive primary healthcare clinical environment, which negatively impacts on their learning. The researcher proposes to conduct a quantitative descriptive study on the student's perspectives regarding the primary health care practice learning environment, which is linked to MacKenzie's (2010) qualitative study.

1.4 RESEARCH QUESTION

The research question for this study will be:

What are the student nurses' perspectives on the primary health care practice learning environments in the Free State Province.

1.5 RESEARCH AIM AND OBJECTIVE

The aim of this study is to:

Describe the student's perspectives on the primary health care practice learning environment.

The objective and sub-objective of the study are to:

- *Describe the perspectives of diploma student nurses at a School of Nursing regarding the primary health care practice learning environment.*
- *Compare the perspectives of the diploma student nurses at three campuses regarding the primary health care practice learning environment.*

1.6. CONCEPTUAL FRAMEWORK

A conceptual framework is an organising image of an issue to be investigated and its basic function is heuristic, which is discovering or exposing the relationship between concepts (De Vos & Strydom, 2011:35).

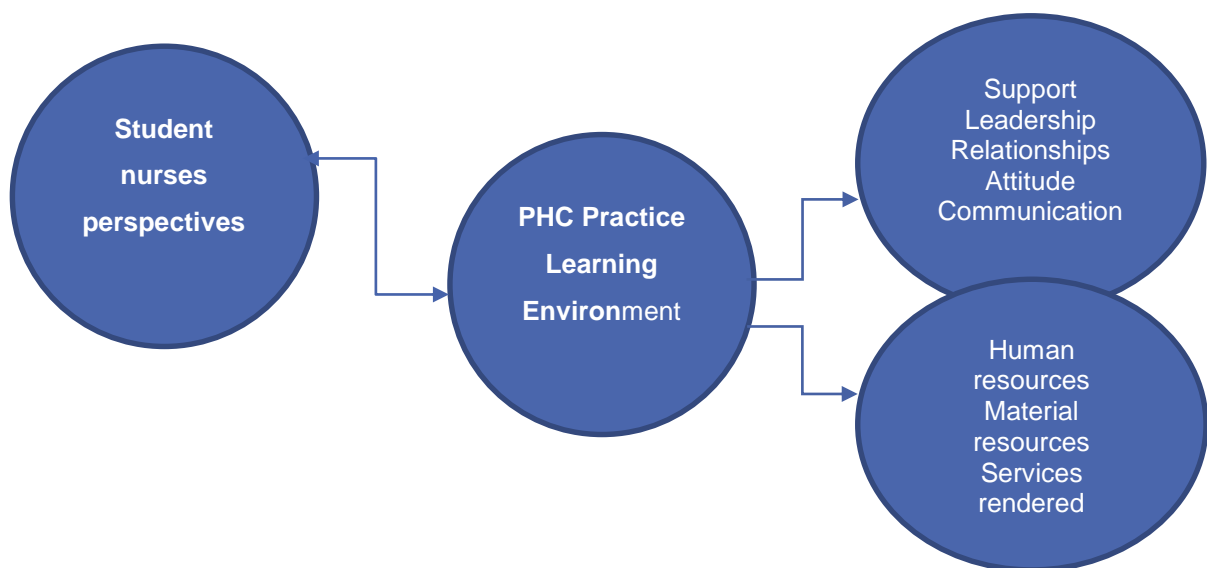


Figure 1 1 Conceptual Framework depicting the relationships between student nurses perspectives and Primary Healthcare (PHC) Practice Learning Environments

The conceptual framework shows a relationship between the student nurses' perspectives of clinical learning and the primary healthcare practice learning environments (support, leadership, relationships, attitudes, communication, human and material resources, and services rendered).

The above components are interactive and require the integration of the students in the practice environment to create a good clinical learning environment, which enhances learning opportunities and maximises the achievement of learning outcomes. The students' perceptions concerning the practice environment influences their ability to learn and consequently their clinical performance. Therefore, practice learning environments must enhance clinical learning. The more the practice environment is conducive to learning, the more the students will be motivated to learn, resulting in high levels of performance and the achievement of clinical competence.

1.7. CONCEPT CLARIFICATION AND OPERATIONALISATION

It is important for the researcher to clarify and operationalise concepts related to a study (Botma, Greef, Mulaudzi & Wright 2010:272, 103; Polit & Beck, 2017:49, 50). The following concepts will be referred to throughout the study:

1.7.1 PERSPECTIVE

Perspective refers to how a person views things, which in literature influences how the story is narrated (Brooks [n.d.]: Online). In addition, perspective refers to a representation that is influenced by the position a person holds (Niederhoff, 2011:2), and an understanding of the relative importance of things (Hughes, 2005:771).

In this study perspective refers to the students' point of view on the primary healthcare practice learning environment, influenced by the learning experiences they had during placement in the primary healthcare clinics. The questionnaire will be used to determine students' perspectives on the primary healthcare practice environment.

1.7.2 PRIMARY HEALTHCARE

Primary health care is provided in the community and addresses the health needs of the community (Clarke, 2016:17; Ernstzen, Statham & Hanekom, 2014:211). This type of health care is usually rendered in homes, general practices, clinics and community health centres, with secondary and tertiary care usually provided in hospitals (Clarke, 2016:17). The National Department of Health (NDoH) Quality

Assurance Directorate (2009:5) refers to primary health care, as a set of prescribed health services, generally falling within the skill base of a professional nurse, technician, mid-level worker, counsellor, community health worker, midwife and emergency medical practitioner. These services may be first point or follow-up care. Services provided include, but are not limited to, the expanded programme on immunisation (EPI), family planning, antenatal care, child curative services, nutrition and growth monitoring and adult curative care (NDoH, 2009:4.14).

1.7.3 PRACTICE LEARNING ENVIRONMENT

The concepts practice learning environment and clinical learning environment are often used interchangeably in the literature (Bruce, Klopper & Mellish, 2011:254; Coetzee, Klopper, Ellis & Aiken, 2013:163; Stokes & Kost, 2009:283). Bruce *et al.* (2011:254) refers to the clinical learning environment as the practice environment, and describes it as an environment, where the students can learn and develop clinical nursing skills in relative safety. An experienced professional nurse usually guides and supervises this setting.

Furthermore, Stokes and Kost (2009:283) refer to the clinical learning environment, as any place where the students interact with clients / patients and families for purposes such as acquiring critical thinking, clinical decision-making, psychomotor and affective skills. On the whole, Stokes and Kost (2009:286) and Donovan and Darcy (2011:123) refer to the clinical learning environment, as a place where students synthesise the knowledge gained in the classroom and apply it in the practical situation.

A practice learning environment is a clinical setting, which should reflect the physical-socio-psychological characteristics of a work setting. These characteristics are determined by factors such as the quality of nursing care, nurse autonomy, learning opportunities, and include physical features such as staffing and resource adequacy, the organisational policies and the characteristic behaviour namely, leadership, support, collegial relationships of people at work (Chan and Hauk (2004) cited in Klopper, Coetzee, Pretorius & Bester, 2012:686).

In this study the practice learning environment will include clinical learning support, leadership, relationships, attitudes, communication, human and material resources and services related to PHC clinics, where second year diploma student nurses are placed to learn and develop clinical nursing skills.

1.7.4 STUDENT NURSE

Higher Education (HE) policies and papers such as South African Higher Education Reviewed: two decades of democracy (2016); Framework for Qualification Standards in Higher Education (2013); Framework for Institutional Quality Enhancement in the second period (2014) and Higher Education Qualification sub-framework (2013) refer to students rather than learners. The Nursing Act (33/2005:30) states that a learner nurse is a person who is following a training programme at a Nursing Education Institution (NEI) and is registered as such with SANC. Although SANC refers to a learner nurse, the researcher opted to refer to student nurses instead of learner nurses.

In this study a student will therefore refer to a student nurse who is registered in a four-year diploma programme at a School of Nursing in the Free State Province.

1.7.5 STUDY CONTEXT

1.7.5.1 Free State Province

The Free State Province is one of the nine provinces of South Africa and is located in the centre of the country (refer to Figure 1.2). The province is large, sparsely populated with 2 786 800 people (Statistics SA, 2014:3) and divided into five districts namely Xhariep, Motheo, Lejweleputswa, Thabo Mofutsanyana and Fezile Dabi District (Refer to Figure 1.3). Motheo District has the highest level of urbanisation (81%), followed by Fezile Dabi (76%) and Lejweleputswa (68.4%). Thabo Mofutsanyana has the highest non-urbanised / rural population (59.8), followed by the 51.6% of Xhariep (FSDoH (2010) Strategic plan 2010/2011-2014/2015:12).

The three sub-campus of the School of Nursing in this study are situated in the Motheo, Lejweleputswa and Thabo Mofutsanyana Districts. Primary Healthcare

(PHC) clinics and other healthcare facilities in the same areas are used for the clinical placements of the students.

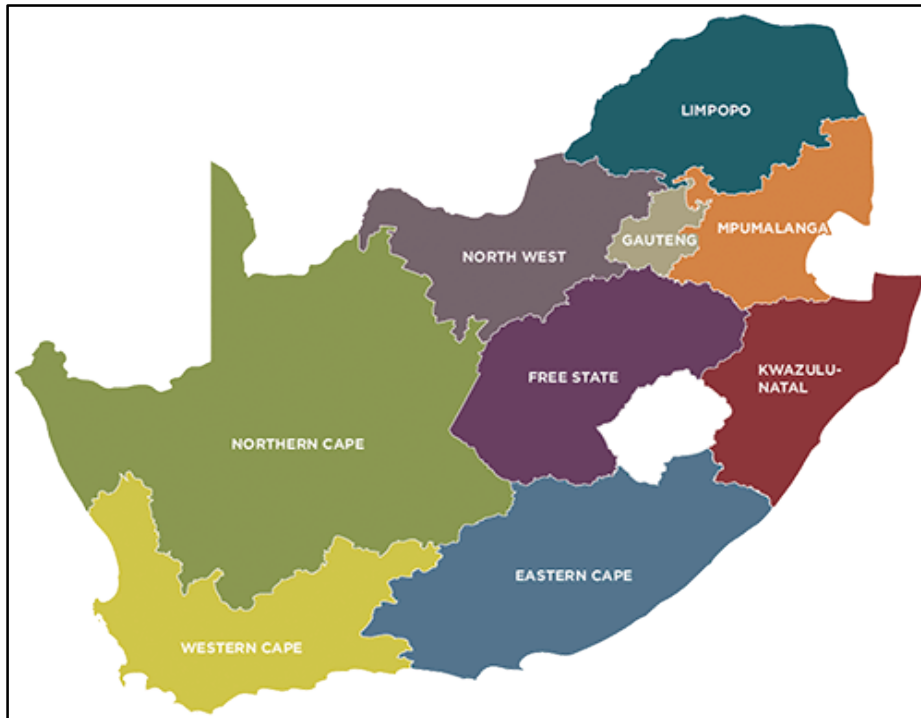


Figure 12 Provinces of South Africa

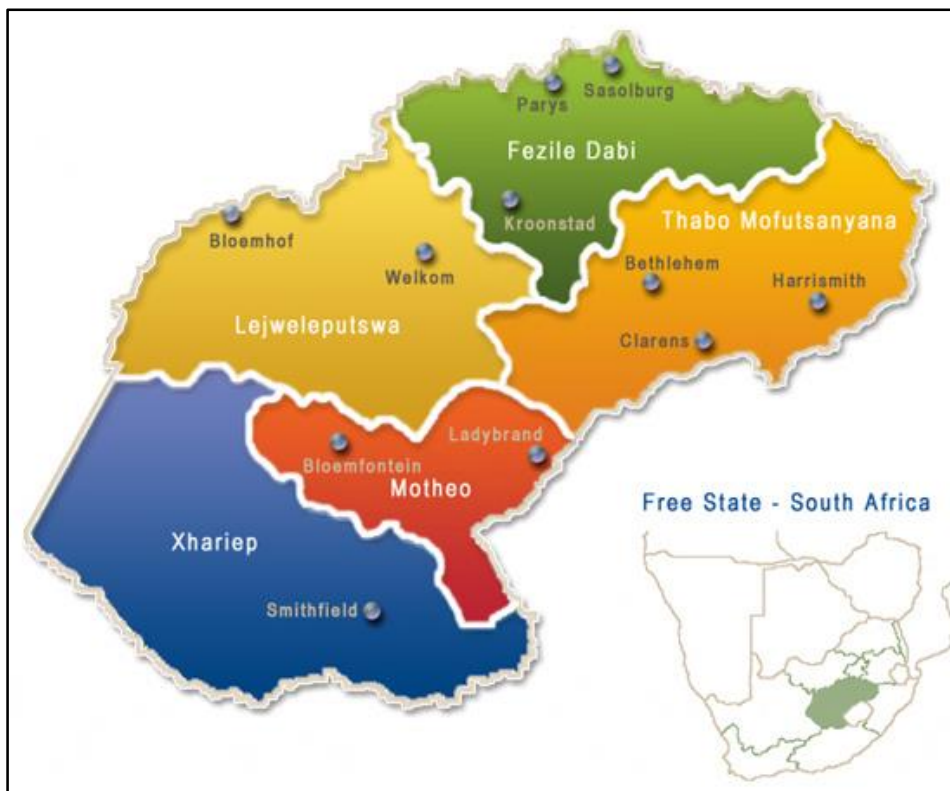


Figure 13 Districts in the Free State Province

1.7.5.2 Educational design

The Free State School of Nursing Four year Programme leading to Registration as a Nurse (General, Psychiatric, Community) and Midwifery (R425) curriculum is content-based, although its community component in the second year includes health promotion, disease prevention and curative care applicable in primary health care provision. Second year content includes maternal and childcare, reproductive health, paediatric care, epidemiology and adult communicable disease. Adult non communicable disease is part of general nursing science (Free State School of Nursing Four year Programme leading to Registration as a Nurse (General, Psychiatric, Community) and Midwifery (R425) curriculum, 2002:33). A block system is used and second year students' clinical placement takes place before their theory block in both semesters. PHC clinics are utilised for clinical placement and the required number of hours in the PHC learning environment is 400 hours (Free State School of Nursing Four year Programme leading to Registration as a Nurse (General, Psychiatric, Community) and Midwifery (R425) curriculum 2002:39).

Clinical facilitators and preceptors are not available and lecturers are responsible for all aspects related to the students' clinical learning. Students are required to practice under the direct supervision of a professional nurse. Clinical learning outcomes achieved by students at second year level include the provision of child health and family planning services, the integrated management of childhood illnesses, the management of child communicable and non-communicable diseases, and the management of adult communicable diseases including priority conditions such as HIV and TB (Free State School of Nursing Four year Programme leading to Registration as a Nurse (General, Psychiatric, Community) and Midwifery (R425) curriculum, 2002:25).

1.8 RESEARCH DESIGN

A research design is the overall plan for addressing a research question, including specifications for enhancing the study's integrity (Polit & Beck, 2017:743). According to Grove, Burns and Gray (2013:195) a research design is a blueprint for conducting the study, which maximises control over factors that could interfere with the validity of the findings.

A quantitative, descriptive, cross-sectional design will be used to describe the perspectives of diploma student nurses on their clinical learning in the Free State primary health care practice environments (Botma *et al.*, 2010:113; Fouché, Delpont & De Vos, 2011:156; Grove *et al.*, 2013:215; Polit & Beck, 2017:180, 206).

A quantitative design is more appropriate for determining the extent of a problem or issue, in this case, the conduciveness of the primary healthcare practice environment for the students' clinical learning and allows the researcher to approach the problem under investigation in a neutral, value free, detached and systematic way (Botma *et al.*, 2010:42; Fouché & Delpont, 2011:64).

A descriptive design will be more appropriate to provide a picture of clinical learning in primary healthcare practice environments, and to identify the challenges related to the current practice (Botma *et al.*, 2010:113; Grove *et al.*, 2013:215). A descriptive design also involves a greater number of subjects and enhances the generalisation of results (Fouché & De Vos, 2011:96).

A cross-sectional design will be used to describe the perspectives of the three groups of third year nursing students of a Free State School of Nursing on their clinical learning in primary health care practice environments. Students from the Eastern, Northern and Southern Campuses will be requested to participate in the study. The advantage of including students from the three campuses in this study is to provide a description regarding clinical learning in the entire school. This cross-sectional study will also be useful for planning the students' clinical placement and estimating future needs, to improve clinical learning in primary health care practice environments (Ellis & Standing, 2010:80; Botma *et al.*, 2010:113; Fouché *et al.*, 2011:156; Grove *et al.*, 2013:221).

1.9. RESEARCH TECHNIQUE

A structured self-administrative questionnaire will be used to collect data required to meet the aim and objective stated for the current study. Questionnaires are suitable to collect large amounts of data within a short time. If a questionnaire is considered to be well structured, the data that is gathered should be valid and reliable. The

disadvantage related to this technique may be a low response rate and responses may be weak (Botma *et al.*, 2010:135; Grove *et al.*, 2013:429).

A structured self-administrative questionnaire with predetermined response alternatives was developed from MacKenzie's (2010) qualitative study on the problems of undergraduate student nurses' learning experiences in primary health care clinics and relevant literature (refer to Addendum K). The questionnaire consists of three sections. Section 1: Biographic data (3 questions), Section 2: Practice Learning Environment has eight sub-headings, which include Support (18 questions), Leadership / professional nurses (9 questions), Relationships (5 questions), Attitude (5 questions), Communication (8 questions), Human resources (5 questions), Material resources (2 questions) and services (4 questions). Section 3: General, consists of 1 yes / no and 2 open-ended questions.

Third year students will be requested to rate statements related to the practice learning environment using a grading scale ranging from one to four, where 4 = Strongly agree (Sa), 3 = Agree (A), 2 = Disagree (D) and 1 = Strongly disagree (Sd). In primary health care, the quality of PHC services is measured against the ideal clinic standard. Firstly, the results for each of the components in the dashboard are calculated. Hundred percent (100%) per is considered ideal, 40-99 as partly functional and < 40 as non-functional or absent. Secondly, the results of all the components are combined. Again a percentage of 100% is considered ideal, 40-99 is considered as partly functional and < 40 as non-functional or absent (Fryatt & Hunter, 2015:26; DoH 2015:169).

1.10 STUDY POPULATION

Third year students from the three sub-campus, who completed their second year clinical practice, will be requested to participate in the study (refer to Ethical Considerations). Based on the number of students registered in 2016, the study population for 2017 is estimated at ± 192 third year diploma student nurses. These students are registered for a 4-year diploma in Nursing and Midwifery. No sampling will be done (refer to Table 1.1).

Table 1 1 Number of second year diploma student nurses at the three campuses of the School of Nursing in 2016 that is estimated to register for their third year in 2017

CAMPUSES	NUMBER OF STUDENTS
Campus A	45
Campus B	75
Campus C	72
Total	192

1.11 PRE-TEST

A questionnaire must be pre-tested prior to a larger study, to determine whether the instructions are effective, the response sets are complete, the time allocated to complete a questionnaire is adequate and the data collection techniques are successful. On the whole, a pre-test assesses the validity and reliability of the measuring instrument with regards to correctness and consistency (Botma *et al.*, 2010:275; Strydom, 2011:240-241; Grove *et al.*, 2013:428).

To ensure that errors are corrected before conducting the main study, 5 third year student nurses at a School of Nursing, at the University of the Free State, who completed their second year clinical practice in 2016, will be requested to complete the questionnaire on a date scheduled in March 2017. The study will be conducted in the same way as the main study. The data collected will not be included in the main study (Botma *et al.*, 2010:275; Grove *et al.*, 2013:428).

1.12 DATA COLLECTION

Data will be collected in March 2017 due to the fact that diploma student nurses' registered for their third year of training, would have completed the required clinical exposure to the PHC practice environment in 2016. The third year diploma student nurses will then have acquired the competencies stated in the curriculum to give adequate and accurate information, regarding each question posed in the structured self-administrative questionnaire.

The following aspects will be planned and implemented to make data collection possible (Botma *et al.*, 2010:145; Grove *et al.*, 2013:46):

- Ethical approval to conduct this study will be obtained from the Health Sciences Research Ethics Committee (HSREC) at the University of the Free State, the Head School of Nursing and the Vice-Rector (Academic), University of the Free State, and the Principal of the School of Nursing where the study will be conducted. Thereafter, a copy of the permission letters will be given to the Heads of the three campuses.
- An information leaflet and informed consent were developed to inform respondents about the study, their rights and responsibilities (refer to Addendum J).
- The students will be visited by the researcher during a lecture contact session in a classroom, before the scheduled date to collect data and the purpose of the study will be explained to them. The Southern Campus will be visited three days before, the Northern Campus two days before and the Eastern Campus a day before.
- Written informed consent will then be obtained from each respondent on the same visit.
- To avoid the contamination of data, the researcher will make arrangements for a specific date, time and venue with the Head and lecturer of each sub-campus, to collect data on the same date and time. To minimise power coercion, the researcher will not be available during the process of completion and lecturers will be in class on the scheduled date and time, will be requested to hand out questionnaires to students.
- A lecturer who will be in class will be requested to avail thirty five minutes of her lecture contact time in the morning session, just before the students are released to take a tea break. After the completion of the questionnaire, the students will be requested to post their questionnaires in a box provided for this purpose. A tightly sealed box with a narrow slot in the top, sufficient to accept a questionnaire, but preventing anyone from accessing questionnaires, will be used. The boxes will be sealed, and kept safe in a cabinet.

1.13 RELIABILITY AND VALIDITY

To enhance the quality of the data that will be gathered (refer to Data Collection), the questionnaire needs to be reliable and valid (refer to Research technique and Pre-test). Reliability refers to the correctness and consistency of the information obtained during the data gathering process. Reliability is determined by a questionnaire's ability to produce the same results every time it is used (Delpont & Roestenburg, 2011:177; Polit & Beck, 2017:179). Validity refers to the degree to which the proposed instrument measures what it is supposed to measure, that is, its authenticity (Delpont & Roestenburg, 2011:172).

The reliability of the questionnaire will be enhanced by revising items that are not clear and, by ensuring the consistency during the application and conducting of a pre-test, before using the questionnaire in the main study (Grove *et al.*, 2013:428; Delpont & Roestenburg, 2011:177).

The validity of the questionnaire will be enhanced by ensuring that it measures the concept in question. The questionnaire was constructed to describe the perspectives of diploma student nurses regarding the primary health care practice learning environments. Both the content and face validity were considered during the construction of the questionnaire. To address the content validity questions that were formulated, based on literature related to the topic of the research, were included. Face validity is considered when a measuring tool (questionnaire) that is well designed, actually reflects the reality of constructs that are being measured, and also reflects what is happening within the context of the study (Du Plooy-Cilliers, Davis & Bezuidenhout, 2014:256).

Research and content experts selected from the Faculty of Health Sciences (FHS), including a member of the Department of Biostatistics (FHS) will be given the opportunity to review the questionnaire. The instrument will be evaluated for representativeness and misinterpretation of the content, and bias (Delpont & Roestenburg, 2011:177).

1.14 ETHICAL CONSIDERATIONS

Ethics should be integrated in every phase of the research process (Botma *et al.*, 2010:4). The principle of respect, justice and beneficence will be observed throughout the process.

Ethical approval will be obtained from the Health Sciences Ethics Research Committee (HESREC) (UFS), and furthermore, the Head School of Nursing and Vice-rector, research (UFS), the principal and heads of the campuses, Free State School of Nursing, to allow students to participate in the study.

The right to self-determination and informed consent, based on the principle of respect for all people, will be observed. Respondents will be informed about the purpose and significance of the study and the researcher will also avail the information sheet, to enable the respondents to make informed decisions about their participation. Participation in the study will be voluntary, and respondents will sign a written consent if they agree to take part and they will be informed about their right to withdraw from the study at any time if they wish to do so, without any effect on their clinical training. Students will not be coerced into taking part in the study (Botma *et al.*, 2010:6; Grove *et al.*, 2013:177).

The right to privacy will be observed, data collection will be conducted in private settings (classrooms) and the respondents will not be coerced into sharing information (Botma *et al.*, 2010:13; Polit & Beck, 2017:147).

Confidentiality and anonymity will be ensured, so as to protect the research respondents' right to privacy. The respondents will not be expected to write their names on the questionnaire. Therefore, the researcher will not be able to link a given response to a particular student (Botma *et al.*, 2010:17-18; Grove *et al.*, 2013:172; Babbie, 2016:65). To ensure anonymity for the Campuses in the publication of results, a code will be allocated to each campus name and the researcher will keep the code numbers in a locked cabinet (Botma *et al.*, 2010:17-18; Grove *et al.*, 2013:172; Babbie, 2016:65). Information shared by the respondents will be kept confidential and only accessed by the people involved in the study. The researcher

will store raw data for a period of 5 years after publication of the study and / according to UFS data storage policy (Grove et al., 2013:532).

The right to fair selection and treatment is based on the principle of justice. As already indicated, the participation in the study will be voluntary (Grove *et al.*, 2013:173; Polit & Beck, 2017:141). The researcher will adhere to the research protocol and information stated in the information leaflet.

The right to protection from harm and discomfort is based on the principle of beneficence, which holds that the researcher should do good and above all, minimise harm (Grove *et al.*, 2013:174). There will be no direct benefits for the respondents or remuneration for participating in the study. However, the information obtained from the respondents could help improve the education of the students during the clinical placement of the students and could consequently improve clinical competence (Grove *et al.*, 2013:176; Polit & Beck, 2017:139).

1.15 DATA ANALYSIS

The researcher will code data provided in the structured self-administrative questionnaires and capture the data in a Microsoft Excel spreadsheet. To capture open-ended questions data, categories will first be developed from the responses received from the students. Each category will then be coded into numerical values (Babbie, 2016:413). The questionnaires, open-ended questions coding list and spreadsheet will also be sent to the supervisor who will re-check the electronic data to ensure quality. Thereafter, the spreadsheet will be forwarded by electronic mail to a biostatistician in the Department of Biostatistics, UFS, who will assist in the data analysis.

Descriptive statistics, namely the means and standard deviations or medians and percentiles will be calculated for continuous data. Frequencies and percentages will be calculated for categorical data. The comparison between campuses and an appropriate T-test will be calculated.

1.16 VALUE OF THE STUDY

The study aims to describe the primary healthcare practice learning environment from a student's perspective and therefore, the research results should benefit the students and the nursing profession as a whole. It will help identify factors in the primary health care learning environment, which facilitates or inhibits clinical learning; assist the nursing education institutions and PHC facilities to identify problems in their clinical education, and lecturers and professional nurses to play their supportive and supervisory roles effectively. These extended roles could in turn create opportunities for the students to integrate theory and practice, increase their clinical skills and become competent professional nurses. Questionnaires developed may be used periodically by the students, lecturers and professional nurses in the practice settings, as a tool to measure the conduciveness of the practice learning environment in other primary health care settings.

1.17 CHAPTER LAYOUT

Table 1 2: Layout of chapters

CHAPTER	DESCRIPTION
1	An introduction to the study, the problem statement and research methodology
2	A literature review focusing on practice learning environments
3	A detailed description of the research methodology
4	A comprehensive discussion addressing the research results
5	Conclusions and recommendations

1.18 SUMMARY

Chapter 1 provided the reader with an overview of the proposed research. To introduce the study, the researcher stated that practice learning environments play an important role in the teaching and learning of the nursing students, and that globally, theory and practice integration remains a challenge. A clearly stated research question follows the aim of the study namely, to investigate the students' perspectives on the primary health care practice environment.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

In Chapter 1 an overview of the research process is presented. The need to conduct research on primary health care learning environments is described. Importantly, expectations to support the students to learn and improve their clinical competence are referred to. The researcher's concern related to clinical learning in primary health care practice environments is mentioned. The fact that a qualitative study (MacKenzie, 2010) provided the foundation for the current study on students' perspectives regarding the primary health care practice learning environment is highlighted.

The overview also includes a description of the research design and technique. Furthermore, the selection of the study population, pre-testing of the questionnaire and data collected are explained. Detailed descriptions of issues such as the data analysis, validity and reliability, ethical issues, limitations as well as the significance of the study are provided.

In Chapter 2 the literature overview addresses key concepts relevant to the practice learning environment. These concepts relate to the title, research questions, research aim, objectives, and the conceptual framework, which guided the study and questionnaire development, are addressed. Concepts related to the conceptual framework are embedded in different parts of the discussion (refer to Figure 1.1).

Learning theories and approaches relevant to practice explain how practice learning occurs. Furthermore, factors that affect practice learning provide a better understanding on why practice learning is challenging to both students and clinical educators.

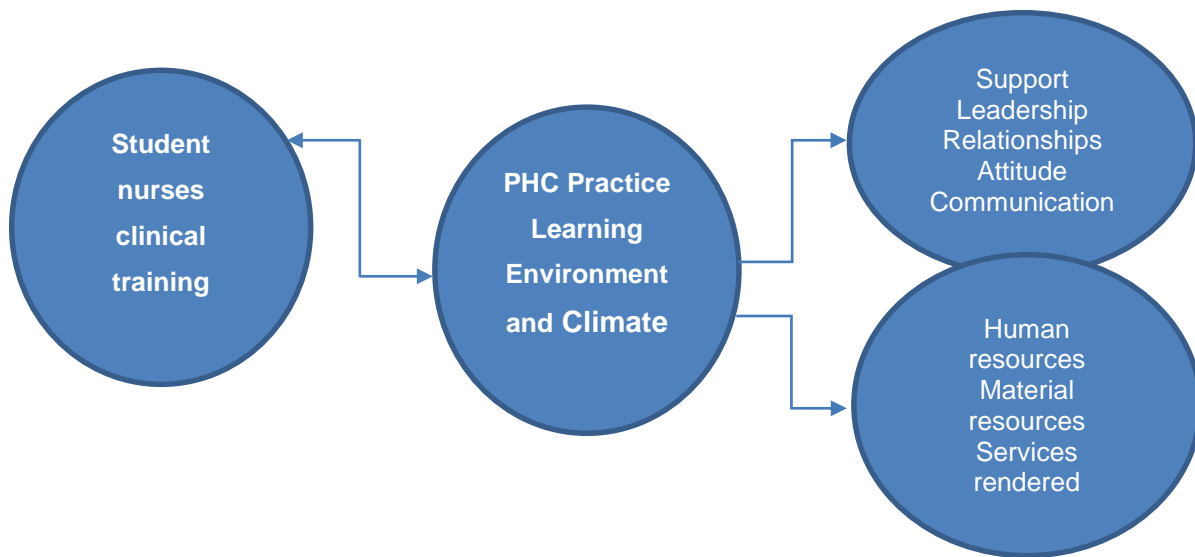


Figure 2 1 Improved conceptual framework to depict the relationships between student nurses and Primary Healthcare (PHC) Practice Learning Environments

The conceptual framework shows a relationship between the student nurses' clinical training and the primary health care practice learning environment, including the learning climate (support, leadership, relationships, attitudes, communication, human and material resources and services rendered).

The above components are interactive and require the integration of students in the PHC practice environment, and the learning environment and climate that enhance learning opportunities and maximise the achievement of the learning outcomes. The PHC practice learning environment influences the students' ability to learn and consequently their clinical performance. Therefore, PHC practice learning environments must enhance clinical learning. The more the PHC practice learning environment is conducive to learning, the more the students will be motivated to learn, resulting in high levels of performance and the achievement of clinical competence.

2.2 CLINICAL TRAINING

The students' clinical teaching and practice learning in the practice environment is a shared responsibility (Hughes & Quinn, 2013:403). Clinical educators are

responsible for teaching in the practice-learning environment and are crucial links to ensure successful experiences for students (Stokes & Kost, 2009:287).

2.2.1 GLOBAL STANDARDS, NATIONAL STRATEGIES AND ACCREDITATION

Global standards for the initial education of professional nurses and midwives require Nursing Education Institutions to:

- Clearly define the clinical outcomes, the role descriptions for theoretical and clinical educators, including clinical supervisors, mentors and preceptors (WHO, 2009:22).
- Build a strong partnership with local academic institutions, other disciplines, clinical practice sites, clinical and professional organizations (WHO, 2009:23)
- Use inter-professional teamwork approaches in their clinical learning and teaching, and have access to the clinical learning sites required for the programme (WHO, 2009:25).
- Designate nurses and midwives with clinical expertise to supervise and teach students in the clinical practice area, form partnerships and secure a variety of qualified people to be clinical supervisors and teachers (WHO, 2009:26).

The model for clinical nursing education and training developed by the Nursing Education Stakeholder (NES) Group (2012) in South Africa recommends a coordinated system of clinical preceptors and clinical supervisors in clinical teaching (Department of Health (DoH), 2012:36). This model identifies the student, the clinical institutions, the nursing education institution and the regulatory body as major components in clinical education (Nursing Education Stakeholder (NES) Group (2012). These components must work together to support and maximise students' clinical learning.

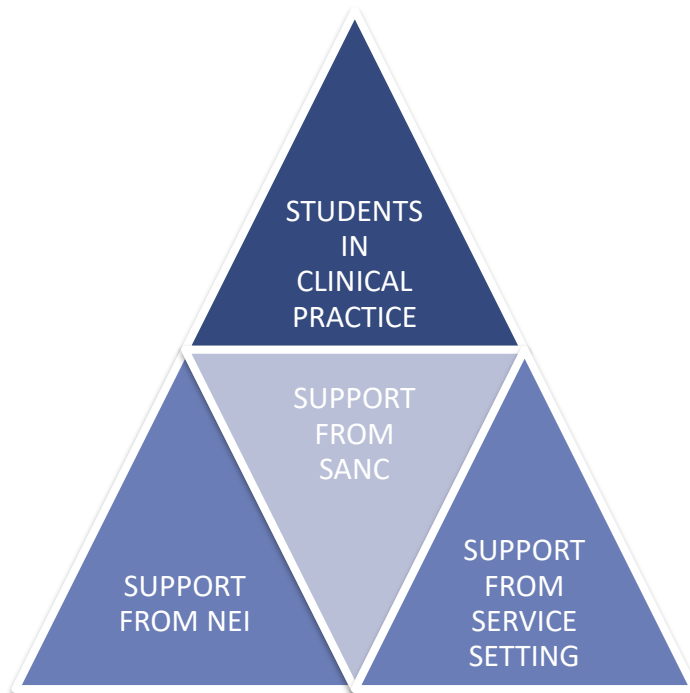


Figure 2 2 Components of the model for clinical nursing education and training (Nursing Education Stakeholders (NES) Group (2012)

In clinical practice, the students need to be supported to achieve their learning outcomes. The nursing education institutions provide education and training required by the programme. Clinical institutions provide environments in which clinical learning takes place, including clinical supervisors, and the South African Nursing Council (SANC) prescribes the standards upon which the students' clinical education and practice must be based. Therefore, an effective, supportive relationship between all stakeholders is necessary to support the student, who is at the centre in clinical education (Nursing Education Stakeholder (NES) Group (2012)).

The SANC has the responsibility to accredit training facilities (Bezuidenhout & Lekhuleni, 2013). The students should have access to sufficient clinical facilities, which are appropriate for the achievement of the outcomes of the programme (SANC, 2013:5). NEIs must have formal agreements with clinical facilities, which address the clinical learning opportunities, the clinical accompaniment and the supervisory needs of the learners placed in these health services (SANC, 2013:5).

2.2.2 DEFINITION AND AIM

Clinical teaching involves the careful design of an environment in which the students have the opportunity to foster mutual respect and support for each other, while they are achieving identified learning outcomes (Stokes & Kost, 2009:287). The aim of clinical teaching is to produce a competent professional nurse capable of providing nursing care based on sound knowledge, decision-making, practised skill and professional values. In order to achieve this aim, the clinical teachers must base clinical teaching on theory and apply it in practice (Bruce et al., 2011:254). Teaching in the clinical environment often takes place in the routine of clinical care, where discussions and decision-making take place in real time (Ramani & Leinster, 2008:347). Therefore, challenges to provide care may influence the achievement of its aim.

Challenges for clinical teachers include physical clinical environments, which are not comfortable for teaching, patient-related challenges such as patients who are unwilling to participate in a teaching encounter, large numbers of students and an increased workload (Ramani & Leinster, 2008:348).

Excellent clinical teachers are organised, supportive, provide direction and frequent, constructive feedback to the students. They demonstrate competence, engage in self-evaluation, and act as role models. Furthermore, excellent clinical teachers target their teaching to the learners' level of knowledge and foster students' independence (Stokes & Kost, 2009:289; Ramani & Leinster, 2008:348). Overall, clinical teachers create practice learning environments, which are conducive to learning (Stokes & Kost, 2009:289).

2.2.3 APPROACHES TO PRACTICE TEACHING AND LEARNING

Three approaches to learning, that is, a superficial, deep or holistic approach, and a strategic approach have been identified (Bruce *et al.*, 2011:124). In a superficial approach, the students simply receive information without scrutinising it. The superficial approach does not stimulate the students to find solutions, but instead encourages them to depend on routine principles and procedures to solve problems.

These students need external factors to apply the knowledge gained in clinical practice (Bruce *et al.*, 2011:124).

Using a deep, holistic approach, the students analyse the information received and seek clarity in order to make sense of it. In this approach it is crucial for the students to notice the integration of theory and practice (Bruce *et al.*, 2011:124). In a practice learning environment where deep learning is valued, innovative teaching strategies which promote active learning, such as problem-based and case studies, are used by clinical teachers (Bruce *et al.*, 2011:124; Hughes & Quinn 2013:45).

The students using the strategic approach to learning aim to succeed. These students follow a particular strategy or plan to reach their goal. They use a flexible approach to learning, which changes between superficial and deep learning, depending on the demands of the learning environment (Bruce *et al.*, 2011:125). Reflective practice diary and critical incident techniques are relevant clinical teaching strategies for such students, as they promote critical thinking (Hughes & Quinn, 2013:387).

The students' characteristics and the learning environment influence the approach to learning. The constructivist approach accentuates that students build their own knowledge, as they experience situations, and the teachers are expected to direct them in a way, which will make the students comprehend the information effectively and relevantly (Jia, 2010:197; Bruce *et al.*, 2011:93; Cadorin, Bagnasco, Rocco & Sasso, 2014:1; Slavin, 2014:234). As a result, student-centred, clinical teaching and learning strategies, where the teacher only guides the students who play central and participative roles in their learning, should be used (Jia, 2010:198; Slavin, 2014:235).

The constructivist teaching and learning uses cooperative learning and discovery learning (Slavin, 2014:235). The principle underlying cooperative learning is that the students are in a better position to comprehend and handle complex situations when working together. Furthermore, constructivists believe that learning is enhanced as the students interact and share knowledge with others. Cooperative learning widens the students' perspective and helps them gain insight and more knowledge, and

enhances their creative and problem-solving abilities (Slavin, 2014:249; Jia, 2010:198).

Cooperative clinical teaching and learning methods include teams, where the students' tasks are to learn and work together in diverse groups; peer-assisted learning, where the students work in pairs, taking turns as a team leader and a learner, and lastly group investigation, where the students work in small groups using group discussions, such as projects (Slavin, 2014:249).

Discovery learning encourages independent learning and prompts the students to work on their own, and teachers allow them to find and form ideas on their own. In addition to developing problem-solving and creative abilities, discovery learning assists the students to develop critical thinking skills (Slavin, 2014:236; Jia, 2010:198).

2.2.4 LEARNING THEORIES

Kolb's theory of experiential learning is based on the principle, that learning is acquired by doing, that is, learning that is gained through experience. The experiential learning cycle begins with a concrete experience, where the students must engage themselves completely in new encounters. Reflection follows, after a process of observation and information-gathering, related to the experience. The next step involves an abstract conceptualization, where the students must generate ideas, which incorporate their observation into logical theories. The last step is active experimentation, where the students must apply these theories in decision-making and problem-solving. During a learning experience, a student moves from action to observation to a varying extent, depending on the nature of a situation (Kolb & Kolb, 2005: Online; Pasarelli & Kolb, 2010: Online; Hughes & Quinn, 2013:28, 29).

According to behaviourists' theories, that is, Pavlov's classical conditioning and Skinner's operant conditioning, most behaviour is learned by making associations (Hughes & Quinn, 2013:86; Slavin, 2014:169). Some human behaviours are prompted by specific stimuli. Behaviourists also focus on relationships between behaviour and consequences (Hughes & Quinn, 2013: 87; Slavin, 2014:169, 170).

Pleasurable consequences reinforce and strengthen behaviour, and unpleasant consequences weaken it. As a result, pleasurable consequences are called reinforcers, as they produce a positive effect. Unpleasant consequences are called punishers and their effect is negative (Slavin, 2014:171). Positive reinforcers include praise for good behaviour. Negative reinforcers may be used as another way to strengthen behaviour, if its consequence is an escape from an unpleasant situation or the way of preventing something unpleasant from occurring (Bruce *et al.*, 2011:77; Slavin, 2014:172).

Social theory is based on recognising the importance of observational learning and self-regulated learning. According to social theorists, learning occurs through role modelling. Role modelling occurs in four phases, that is, the attention phase, where the observers / students pay attention to a role model. The level of attention the students pay to a role model depends on the type of behaviour displayed by a role model. Students pay attention to role models who display good behaviours (Bruce *et al.*, 2011:79; Hughes & Quinn, 2013:82; Slavin, 2014:184).

The retention phase is characterised by retaining the modelled behaviour, reproducing it and being motivated to repeat the behaviour. Bandura [n.d.] cited in Slavin (2014:191) proposed that the students be taught to have expectations related to their performance and to take the initiative in regulating their behaviour. These expectations motivate the students to pay attention. Once the educators have the students' attention to the expected behaviour, they should be given more opportunities to practice the behaviour (Bruce *et al.*, 2011:79; Slavin, 2014:185).

During the reproduction phase, the students try to match their behaviour to the model's behaviour (Bruce *et al.*, 2011:79; Slavin 2014:185).

The final stage of the observational learning process involves reinforcement or motivation. This can be in the form of internal or external rewards. The students will imitate a role model, because they believe that doing so will increase their chances to be rewarded (Bruce *et al.*, 2011:79; Slavin, 2014:185).

2.2.5 NEW TRENDS CLINICAL TEACHING

New clinical teaching models include a partnership model and preceptorship model. Partnership models of clinical teaching use nurse clinicians to provide clinical teaching to the students. Nurse clinicians liaise with and are guided by nurse educators to enhance clinical learning and the achievement of learning outcomes (Gaberson, Oermann, & Shellenbarger, 2015:118). Examples of partnership models include, but are not limited to, a dedicated education unit and a scholar model (Gaberson *et al.*, 2015:118).

A Dedicated Education Unit (DEU) model utilises the clinical nurse and other staff to provide clinical teaching (Gaberson *et al.*, 2015:118). A study conducted by Nishioka, Coe, Hanita and Moscato (2014:306) confirms that nursing students experienced the DEU learning environment as welcoming, committed to teaching and providing a high standard of clinical learning.

In a *scholar model*, nurse experts in clinical practice provide clinical teaching to the nursing students, and participate in their clinical assessment (Gaberson *et al.*, 2015:115). An advantage of this model is that the students are taught by expert clinicians in clinical practice (Gaberson *et al.*, 2015:115) and therefore, this enhances the application of theory in practice (Arnold, 2013:72).

Preceptor Model

In the preceptor model, professional nurses with expertise in clinical practice are appointed as clinical preceptors, to provide clinical teaching to the students (Gaberson *et al.*, 2015:113). To ensure effective clinical teaching and the achievement of students' learning outcomes, professional nurses should be adequately prepared and supported (Cloete & Jeggels, 2014:2). This model encourages individualisation, promotes good relationships with the students (Gaberson *et al.*, 2015:113) and consequently assists the nursing students to develop the clinical knowledge and skills (Mutair, 2015:3). In South Africa, clinical teaching is a shared responsibility between the nurse educators, professional nurses and clinical preceptors (Muthathi, Thurling & Armstrong, 2017:1).

2.3 CLINICAL TRAINING REQUIREMENTS

The prescribed clinical training hours for the four year nursing programme according to the SANC (1985:21) is as follows: Refer to Table 2.1.

Table 2 1 Distribution of prescribed clinical training hours

HOURS	ALLOCATION
4000	Distributed between the four sub-disciplines, that is, Nursing practice (general, community and psychiatric) and Midwifery
1000	Preventive and promotive health
1500	Curative health
500	Rehabilitation and other, at the discretion of the school
1000	Midwifery

At second year level, the students are required to complete 1000 hours clinical experience, distributed between General and Community Nursing Practice. Primary health care clinics accredited for R425 clinical training are utilised for clinical placement and the required number of hours in the PHC learning environment is 400 hours (Free State School of Nursing Four year Programme leading to Registration as a Nurse (General, Psychiatric, Community) and Midwifery (R425) curriculum 2002: 39).

Clinical learning outcomes to be achieved by the students at second year level, include the provision of child health and family planning services, the integrated management of childhood illnesses (IMCI), the management of child communicable and non-communicable diseases, and the management of adult communicable diseases, including priority conditions such as Human Immunodeficiency Virus (HIV) Infection and tuberculosis (TB) (Free State School of Nursing Four year Programme leading to Registration as a Nurse (General, Psychiatric, Community) and Midwifery R425 curriculum, 2002:25).

2.4 PRACTICE LEARNING ENVIRONMENT AND LEARNING

CLIMATE

Two main concepts depicted in the conceptual framework, which are related to the student nurses' clinical training, are the practice learning environment and the learning climate.

2.4.1. PRACTICE LEARNING ENVIRONMENTS

Practice learning environments are complex, interactive networks of forces influencing learning outcomes in the practice setting (Said, Rogayah & Hafizah, 2009:16; Chuan & Barnett, 2012:192; Abeer & Nervana, 2015:34). With reference to Thi (2015:1) practice learning environments refers to diverse physical locations, contexts, and cultures in which students learn. In support of Thi (2015:1), some authors, Said *et al.* (2009:15) and Jorie, Sooyoun, Victoria, Goode, Robert, Shochet, Scott and Wright (2014:1687) state that learning environments include the educational, physical, social, and psychological context in which trainees are immersed.

Nursing, a practice-based profession, and requires the students to transfer in practice learning environments the knowledge they have acquired in theory (Papastavrou, Limbrinou, Tsangari, Saarikoski & Leino-Kilpi, 2010:181; Kaphagawani & Useh, 2013:181; Karabulut, Aktaş & Alemdar, 2015:10; Manoochehri, Pour, Hosseini, Habibi & Karami, 2016:1164). The students' placement in practice learning environments plays a crucial role. The aim is mainly to assist them to integrate theoretical knowledge, when mastering prescribed clinical skills (Thi, 2015:1).

2.4.2 LEARNING CLIMATE

Broadly, the learning climate refers to "the context in which learning takes place in terms of the setting, shared perceptions on policies, practices and procedures" (Lombarts, Heineman, Scherpbier & Arah, 2014:1). In addition, Youssef, Wazir, Ghaly, and Khadragey (2013:2), describe the learning climate as the environment or atmosphere experienced or perceived by the students and teachers in a teaching

and learning environment. Not only did Schneider *et al.* (2011) cited in Moradi, Nima, Ricciardi, Archer and Garcia (2014:2), refer to the learning climate as shared perceptions of organisation's policies and practices, but also the behaviours supported, expected and rewarded by the organisation.

Importantly, the learning climate encompasses structures and practices, which support learning, shared vision and goals, cooperative learning, challenging attitudes, continuous improvement, management support and lifelong learning commitment (Malone (2003) cited in Moradi *et al.*, 2014:2); leadership style, work conditions, workforce responsibilities, developmental opportunities and general satisfaction (Moradi *et.al.*, 2014:2). Quality clinical placements are related to relationships, learning that takes places in the practice environment, and best practices in executing nursing care (Siggins Miller Consultants, 2012:5).

2.4.3 DIFFERENCES BETWEEN PRACTICE LEARNING ENVIRONMENT AND LEARNING CLIMATE

Whereas the practice learning environment encompasses the physical, social and psychological or mental, and educational aspects which affect clinical learning (Jorie *et al.*, 2014:1687), the learning climate focuses on the educational and psychological factors such as support, relationships, attitudes, communication and leadership. The learning environment therefore, includes the practice learning environment resources, material resources, and services in the practice setting, in addition to the support, relationships, attitude, communication, leadership which constitute the learning climate. Overall, the practice learning climate forms part of the practice learning environment.

2.5 IMPORTANCE OF PRACTICE LEARNING ENVIRONMENT AND LEARNING CLIMATE

2.5.1 PRACTICE LEARNING ENVIRONMENT

Practice learning environments are the most influential contexts for gaining nursing skills and knowledge. An important task is to ensure good learning environments in all clinical practice placement settings (Bos, 2014:3; Tiwaken, Caranto & David,

2015:66). The culture of the practice learning environment to which students are introduced influences what they learn and their professional behaviour (Siggins Miller Consultants, 20012:5). It is therefore, imperative to build a climate of trust and respect to enhance the students' learning positively (Borragerio, 2014:19).

In health care, learning is frequently described as an experience-based process, which promotes long-term professional development and the acquisition of knowledge, abilities and competence (Cadorin *et al.*, 2014:3). Meaningful learning assists health care professionals to utilise the knowledge they gained more effectively and contribute to improve the quality of their practice (Cadorin *et al.*, 2014:3). Clinical practice is the area for the students to meet with patients and experienced health care professionals to experience the practice of nursing (Tiwaken *et al.*, 2015:69). The aim of clinical practice learning therefore, is to help the students gain professional competence and the willingness to accept personal and professional accountability for their acts and omissions (Nursing and Midwifery Board of Ireland, 2015:4).

Practice learning environments provide the students with unique learning opportunities in which classroom theory and skills are practiced in real-life situations (Thi, 2015:67). Clinical learning focuses on authentic problems, which provide opportunities for the students to learn through active participation. Through participation, the students acquire basic and advanced nursing skills (Bos, 2014:11; Bigdeli, Pakpour, Aalaa, Shekarabi, Shanjari, Haghani & Mehrdad, 2015:2; Salam, Siraj, Khan & Akram, 2016:40). Educational and clinical institutions are therefore required to focus on clinical teaching and learning, and to create good practice learning environments to enhance the students' learning.

A good clinical teaching environment furthermore ensures the relevancy of teaching and learning, the promotion of good attitudes and behaviour towards patient care and consequently, the students' achievement, satisfaction and success (Saja & Ghazi, 2011:7). In addition, the quality of the clinical learning environment is important for the nursing students' clinical decision-making and academic motivation (Papastavrou *et al.*, (2010); Salminen *et al.*, (2010) cited in Aktas & Karabulut, 2016:125, 128).

Clinical learning environments promote the socialisation of the students into the profession and their roles as students (Liljedahl, Boman, Falt & Laksov, 2015:778). Role models in the profession instil professional attitudes, values, and behaviours unique to the profession (Bos, 2014:9).

Interactions with real patients also play a vital role in learning. The ability to assist patients independently to meet individualised needs strengthens the students' self-esteem (Bos, 2014:11). Interaction between the students and staff members is equally important for the effective integration into a multidisciplinary team (Bos, 2014:8). Collaboration between the student, patients and other members of the multidisciplinary team improve patient care (Bos, 2014:8). Despite the crucial role played by the practice learning environment in the students' learning, the practice learning environment remains unpredictable (Bos, 2014:3; Tiwaken *et al.*, 2015:66).

2.5.2 LEARNING CLIMATE

Various factors such as attitudes, work ethics, staff members, equipment and supplies, patients and family members which fall outside the scope of instructors influence the environment (Tiwaken *et al.*, 2015:66). In addition, the type of learning culture, learning atmosphere, supervisory relationship and how supervision is organised play a vital role (Bos, 2014:3).

Good interpersonal relationships between the nurse practitioners and the students are very important. Practitioners need to put the students at ease (Huges & Quinn, 2013:362), to facilitate learning (Chang & Mark, 2011:37). If trainees believe that the work environment is conducive to high performance, they will feel more confident that their efforts will result in attainable and desirable outcomes (Kontoghiorghes (2004) cited in Donovan & Darcy, 2011:124). In addition, a study conducted by Lombarts *et al.* (2014:5) confirms that teaching performance is positively affected by better learning climates. In this research, the learning climate refers to the primary health care practice learning climate.

2.6 FACTORS INFLUENCING THE PRACTICE LEARNING

ENVIRONMENT

The practice learning environment is influenced by leadership; supervision; relationships; educational skills level and the level of preparedness of educators and / or supervisors; cultural attitudes towards education; communication; learning opportunities; enabling structures, and policies (Darcy Associates Consulting Services, 2009:74).

Leadership denotes an “influential role relationship between leaders and followers who intend to make real changes that reflect their common goal” (Clarke, 2016:52; Jooste, 2016:72). In the primary health care practice environment, the leadership roles of the clinic managers put them in the centre of promoting a learning culture. Their roles and competencies include overseeing the clinic’s daily functioning, promoting communication, making sound clinical judgements, working effectively with or through patients, staff, and other members of the multidisciplinary team to achieve the stated goals of the clinic (Clarke, 2016:52). The clinic manager also:

- provides regular supervision in order to improve and maintain quality client care;
- guides and supports to identify areas that require improvement and assists with constructive feedback in order to achieve the goals of quality client care;
- teaches and supports staff to maintain and improve quality care;
- manages human resources functions at the clinic level plus equipment;
- identifies the training needs of staff; and
- implements all policies and guidelines in the clinic (Clarke, 2016:54).

Overall, clinic managers play a crucial role in creating good practice learning environments. Learning occurs as the students interact with and observe clinic staff members who display good practices in the practice setting.

Support rendered by the supervisors increases the students’ ability to integrate theory and practice, and therefore increases clinical learning. Dale and Dale (2013:3) and Ma, Li, Liang, Bai and Song (2014:5) accentuate that competent, well-prepared supervisors who are, for example, informed about the expectations, are motivated to

teach, are open and flexible when necessary, and improve the students' motivation to learn. Similarly, willing clinical educators that socialise them into their nursing practise roles enhance the students' learning. Regular appointments and time to reflect on their practice add to the students' clinical experience (Newton, Jolly, Ockerby & Cross, 2012:2338; Motseki, 2013:48; Borragerio, 2014:19; Mwale & Kalawa, 2016:1).

A student-supervisor relationship characterised by mutual respect, open communication, and timely constructive feedback, promotes a relaxed and positive climate which enhances learning (Borragerio, 2014:19). On the other hand, supervisors who are not adequately informed about the students' learning outcomes and not adequately prepared for their supervisory role, impact negatively on clinical learning (Dale *et al.*, 2013:3). In addition, De Ridjt (2013:65) confirms that peer support increases the transfer of learning. Furthermore, Gilligan, Outram and Levett-Jones (2014:7) state that inter-professional groups of students working together give students the opportunities to interact and learn from each other. Failure to provide opportunities for the students to work with and learn from other members of the multidisciplinary team decreases the students' learning (Gilligan *et al.*, 2014:8).

Interpersonal relationships are highly valued by the students in the clinical learning environment (Darcy Associates Consulting Services, 2009:6; Papathanasiou *et al.*, 2014:560). Furthermore, Newton *et al.* (2012:2337) states that the student-teacher relationship is enhanced, and the teacher can gain a greater understanding of the student's individual support needs, if the clinical teacher is placed in one area for an extended period of time. On the other hand, the lack of attention into individual differences decreases the students' ability to develop a sound clinical judgement (Bigdeli *et al.*, 2015:5).

The educational atmosphere in the practice environment plays a crucial role in enhancing clinical learning. Good staff morale, team spirit and interpersonal relations between the professional nurses and the students enhance the professional socialisation and enhance the students' motivation to learn. Accepting students as team members who can contribute to the delivery of quality patient care is important for the students' personal and professional development. (Kapucu & Bulut,

2011:1153; Borrageiro, 2014:9; Nursing and Midwifery Board of Ireland, 2015:6; Bigdeli *et al.*, 2015:6). In a student-friendly and safe environment, the students are open to new information (van Rooyen, 2012:517; Dale *et al.*, 2013:3). In contrast, research studies conducted by Hess (2012:57) and Dale *et al.* (2013:3) showed that students perceived the clinical environment to be hostile and agreed that the staff members had a negative attitude towards them.

Communication affects all aspects of placement learning and support. Good quality, timely, open communication between all parties involved in practice learning, both between and within institutions, ensures positive benefits to students' placement learning experiences (Williamson, Callaghan, Whittlesea, Mutton & Heat, 2011:17).

Learning opportunities in the primary health care environment should be appropriately structured, and supervised to optimise learning. In PHC, the nursing students have the opportunity to learn to independently assess the patients' general health status by providing personal care (Bos *et al.*, 2015:175). Students learn effectively when they are actively engaged with a variety of clinical learning tasks (Newton *et al.*, 2012:2338; De Ridjt, 2013:66; D'Souza, Venkatesaperumal, Radhakrishnan, & Balachandran, 2013:28; Bigdeli *et al.*, 2015:6). The students perceive their engagement in the clinical environment as stressful and enjoyable at the same time, motivating them to learn and develop analytical reasoning skills (D' Souza *et al.*, 2013:28).

Organisational policies form a foundation for providing a consistent standard of care in the organisation (Karen, 2014:269; Darcy Associates Consulting Services, 2009:76). Organisational policies provide guidelines for all organisational activities (Darcy Associates Consulting Services, 2009:76; Karen, 2014:269) and therefore, help socialise students into the nursing profession (Karen: 2014:269). As the resource informing clinical practice, organisational policies should be well documented, succinct and based on evidence to promote the best clinical practice (Darcy Associates Consulting Services, 2009:77). The practices within clinical environments affect how nurses interact with each other and how they approach their nursing care (Henderson, Briggs, Schoonbeek & Paterson, 2011:196).

The educational programme design plays a crucial role in the students' learning. The approach to teaching and learning may also influence learning. As compared to a student-centred approach, a teacher-centred approach does not enhance learning (Odole, Odunaiya, Oyewole & Ogunmola, 2014:66).

Behavioural modelling in clinical practice areas plays a significant role in motivating the students to learn. Professional nurses who are positive role models instil learning about caring in their students (Henderson *et al.*, 2011:196; Ma *et al.*, 2014:3). Observing good moral values in nurses as role models promotes a sense of responsibility in the students and consequently increases clinical learning (Nasrin, Soroor & Soodabeh, 2012:5; Ma *et al.*, 2014:5; Lestari, Stalmeijer, Widyandana & Scherpbier, 2016:9). On the other hand, observing harsh behaviours displayed by some staff members towards the patients and low clinical knowledge decreases the students' motivation to learn (Nasrin *et al.*, 2012:5).

Similarly, the role played by the students in promoting their clinical learning is crucial. The students' preparedness, willingness to be supported and to participate in the provision of care impact on their learning (Dale *et al.*, 2013:4; Lewin (2007:239) cited in Dimitriadou, Papastavrou, Efstathiou, & Theodorou, 2015:237).

Adequate and modern facilities, with a dedicated space for the students and clinical supervisors help facilitate the students' clinical learning (Zakaria & Duad, 2009:6; Williams, Ernstzen, Statham & Hanekom, 2014:209).

2.7 EFFECTIVE PRACTICE LEARNING ENVIRONMENTS

Practice learning environments influence the students' learning, therefore, it is very important that the standards aimed at providing quality health care, and clinical training required by professional bodies, are met (Hughes (2003) cited in Hughes & Quinn, 2013:268). The students perceive the following characteristics, according to Hughes and Quinn (2013:361), as important:

2.7.1 HUMANISTIC APPROACH TO STUDENTS

Qualified staff that treat the students with respect, are approachable, helpful, that provide support when necessary and try to foster the students' self-esteem.

2.7.2 TEAM SPIRIT

Qualified staff that promote teamwork, involve the students in relevant activities, and consequently make them feel a part of that team. Furthermore, the staff that creates an inclusive and friendly atmosphere through their relationship with the team.

2.7.3 MANAGEMENT STYLE

An efficient, flexible approach used to render quality health care. Teaching takes priority and the students' contributions are valued. Nursing practices are aligned with what is taught in the classroom.

2.7.4 TEACHING AND LEARNING SUPPORT

A multidisciplinary team that participates in the teaching and learning activities. Qualified staff act as supervisors, mentors, preceptors and assessors as appropriate, and the students are motivated to take responsibility for their own learning.

2.8 RESPONSIBILITY FOR PRACTICE LEARNING

A supportive clinical learning environment is necessary for the success of teaching and learning (D`Souza *et al.*, 2013:26).

To ensure that the students are adequately prepared for their clinical role as future professionals, the following criteria should be met by Nursing Education Institutions:

- The curricula reflect the clinical outcomes for each programme with a clinical component at the nursing education institution (SANC, [n.d.]:19).
- Programme outline clearly sets out the plan for opportunities for the graduate to obtain competence (SANC, [n.d.]:8).
- Total clinical practice hours are adequate for the graduates to achieve competence (SANC, [n.d.]:11).
- Clinical practice learning commences from the first year of training (SANC, [n.d.]:5).
- Theory precedes practicum (SANC, [n.d.]:5).

- Practicum hours are not less than 60% of the total duration of the course (SANC, [n.d.]:5).
- Minimum of 8 weeks uninterrupted practicum at the end of the course to allow for the transition into the workplace (SANC, [n.d.]:5).
- The total length of clinical experience allows the graduate to meet competence outcomes (SANC, [n.d.]:14).
- The total clinical learning experience hours are not less than 2800 hours (SANC, [n.d.]:12).
- Clinical learning experience supports the learning activities and provides opportunities to attain the learning outcomes (SANC, [n.d.]:14).
- Academic staff involved in supporting and assessing the students are experienced and adequately prepared for their role (SANC, [n.d.]:15).
- A situational analysis has been done within the last 5 years to review the health care needs of the local community (SANC, [n.d.]:19).

In line with the National Strategic Plan for Nurse Education and Training (2012/2013-2016/2017:89) and Nursing Education Stakeholders Group (NES), (2012), clinical placement must be planned jointly by the nursing education institution and clinical staff. Nurse educators attached to NEIs are primarily responsible for promoting the quality of the clinical learning of the students. Professional nurses in clinical settings, acting as clinical supervisors, are responsible to optimise the student nurses' professional development (DoH, 2012:89, 90).

Practice learning also requires collaborative partnerships between Nursing Education Institutions (NEIs), clinical facilities, interprofessional teams and students (Embo, Driessen, Valcke & van der Vleuten, 2015:343; Lammont, Brunero & Woods, 2015:129). Interprofessional collaboration with members of the health care team enhances the student learning through knowledge sharing. All staff members in the practice setting, therefore, play a vital role in in this regard (Rowe, Frantz & Bozalek, 2012:216; Bos, 2014:4; Salam *et al.*, 2016:42).

Without role players such as clinical preceptors and mentors, clinical learning is not possible. Clinical preceptors are experienced nurses, midwives or specialist primary

health care nurses, who act as role models and resources for the students during a specific time span or experience (Hughes & Quinn, 2013:375). Clinical preceptors link NEIs with practice settings and facilitate the clinical experiences of the students. Academic staff works hand in hand with the preceptors to ensure quality staff development and support (Nursing Education Stakeholder, 2012; Borrageiro, 2014:1). Currently, the School of Nursing does not have preceptors / clinical facilitators. Professional nurses and nurse educators are responsible for clinical supervision.

A mentor is a qualified and experienced member of the practice-placement staff, who enters into a formal agreement to provide educational and personal support to a student (Hughes & Quinn, 2013:374). Experienced professional nurses therefore, induct students in the practice environment and assist them with skills development, understanding and attitudes. Other supportive roles include teaching, supervision, guidance, and the evaluation of the learners (Hughes & Quinn, 2013:374).

Clinical educators or clinical facilitators are qualified nurse educators with a broad spectrum of clinical competencies. Their responsibilities include clinical teaching, supervision and the assessment of the students. Additionally, some clinical educators are involved in the development of teaching programmes (Borrageiro, 2014:5; Hughes & Quinn, 2013:378).

2.9 SETTINGS FOR PRACTICE LEARNING

Practice learning settings include hospitals providing in-patient and out-patient services, PHC clinics and community settings including schools, each with their own distinct challenges (Ramani & Leinster, 2008:347; Thi, 2015:67). Compared to the hospital, primary health care settings are different, but important practice learning environments. Clinical supervisors can educate the students and the health care users at the same time (Hughes & Quinn, 2013:362).

Services / programmes provided at PHC settings include health promotion; the management of communicable disease including Tuberculosis, HIV and AIDS, mental health and substance abuse, School Health Services; oral health; chronic diseases and geriatric care; women's reproductive health; sexual-reproductive and

youth health services; Integrated Management of Childhood Illness (IMCI) (NDoH, 2009:5.1).

PHC clinics offer the students the opportunity to acquire knowledge, attitudes and skills in treating children's common childhood illnesses in accordance with the IMCI guidelines. Learning opportunities such as assessing and managing children; taking the complete history including a sexual history and performing a complete physical examination, are available in this environment. Maintaining records such as patients' chronic conditions registers, chronic diseases management register and treatment record, child health records, and notification of communicable diseases according to protocol, are also part of the student experiences (NDoH, 2009:5.7,5.27).

Community-based services provide opportunities to work with NGOs and Community-Based Organisations (CBOs) in dealing with chronic conditions; provide health education and information on modifiable risk factors; the early recognition of disease symptoms and the need for regular check-ups. Furthermore, Community-based services promote the students' collaboration with different departments such as schools, churches and community-based organisations; and NGOs implementing health promotion activities leading to the prevention of diseases such as STIs with social workers and other sectors to improve people's health. Facilitating the establishment and sustainability of health promotion activities such as community development projects also form part of Community-based experiences for the students (NDoH, 2009:5.77).

2.10 BEST PRACTICES TO CREATE POSITIVE CLINICAL LEARNING ENVIRONMENTS

The framework below primarily indicates factors that are manageable in order to deliver the best possible clinical learning environment (Darcy Associates Consulting Services, 2009:74; Work integrated Learning Faculty of Health Sciences, University of Sydney, 2014:9).



Figure 2 3 *Best clinical learning environment framework (Work integrated Learning Faculty of Health Sciences (University of Sydney, 2014:9).*

The above elements are interrelated and the framework can be used by education providers, health services, clinical educators and learners to inform policies, practices or behaviours, which improve clinical training experiences for all concerned (Work integrated Learning Faculty of Health Sciences, University of Sydney, 2014:9).

The elements are as follows:

1. An organisational culture that values learning

In an organisation, that values teaching and learning, educators and students are important. Staff development opportunities are included in all aspects of planning. Facilities and resources are optimally utilised to support innovative education.

2. Best practice clinical practice

The staff and the organisation demonstrate best practices in providing nursing care in terms of knowledge, skills, competencies, and the adoption of best evidence into practice. Best practice clinical practices include, but are not limited to well-documented policies and procedures. These guidelines should provide the necessary structure to deliver consistent standards of service throughout the

organisation, and play an important part in the professional socialisation of students (Darcy Associates Consulting Services, 2009:76).

3. A positive learning environment

Learners and educators consider a positive learning environment one that is safe (physical, emotional, cultural and professional safety), and welcoming. Students receive an appropriate orientation, are included in activities, made to feel wanted and education is valued.

Appropriate learning opportunities within this environment include students, educators, patients, and other members of the multidisciplinary team. To optimize learning, the following aspects are crucial:

- Clear objectives and clinical educators that are knowledgeable about the expected educational outcomes, the knowledge and proficiency level of each cohort of students;
- Staff that are highly competent in facilitating clinical education and also possess appropriate interpersonal skills;
- *Students that are well-prepared*, demonstrate professionalism and are willing and able to adapt their learning style to new environments;
- *Ratios of students to educators that are appropriate*. Required ratios are necessary to ensure that educators are able to carry out their supervisory role effectively;
- *Continuity of learning experiences*, to assist in professional socialisation of the students, make them feel accepted and assist educators to know students better and individualise them;
- *Planned learning programmes and assessment*, with clear learning outcomes, activities and timeframes.

4. A supportive health service training provider relationship

Clinical and educational institutions recognise their importance and value, and the need to be supportive to facilitate clinical education.

5. Effective communication processes

Effective communication promotes the interaction and sharing of information between all the members involved in clinical education. It includes mechanisms for communication between the students and educators. Most importantly, it ensures good feedback mechanisms. Good feedback is specific, timely, balanced, constructive and two-way.

From a student's perspective, feedback mechanisms need to be carefully constructed to provide a learning opportunity.

6. Appropriate resources and facilities

The students should have access to the facilities and materials needed to facilitate their clinical learning experience. This may include areas to facilitate reflective practice, access to evidence-based resources, peer support and communication tools, and work spaces.

For health care services to meet best practices related to a clinical learning environment, facilities should possess more than a minimum number of the elements stated. It is important to note that all stakeholders in clinical teaching and learning have a role to play in creating and maintaining best practice, clinical learning environments.

2.11 CONCLUSION

This chapter presents a literature overview on the practice learning environment and key issues that underlie this environment. The issues refer to the practice learning environment, and learning atmosphere, the importance of the practice learning environment, clinical training requirements, effective clinical learning environments, and settings for clinical practice. Furthermore, the discussion includes references to the responsibility for practice learning, clinical teaching and the practice learning environment, theoretical approaches to teaching and learning, as well as best practice, clinical learning environments.

Based on the literature review, the researcher concludes that most research studies have been conducted in hospital settings and very few in the primary health care practice environment. The literature provides adequate information to support the

aim and objectives of the current study, and serves as a foundation for the development of the questionnaire, required to determine the students' perspectives on the PHC practice learning environment. The following chapter will present a detailed process followed to collect data in order to answer the research question.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In Chapter 2, literature on the practice learning environment and its importance on the students' learning, theories applicable to practice learning, practice learning professional body requirements and the desired characteristics of practice learning environments, approaches to practice learning, practice learning teachers, best practice clinical learning environments and the assessment of practice learning environments was discussed. Existing literature shows that most studies on practice learning environments were conducted in hospital settings and a few in primary health care settings.

In Chapter 3, a detailed description of the research process, that was followed to ultimately answer the research question and the objectives, is given. The chapter includes information on the selected research design and technique, the identification of the population that best suited the aim and objective of the study, the process of data collection and analysis, the methods to ensure validity and reliability of the data collection instrument, and the ethical principles followed throughout the process, to protect the rights of students (Botma, Greef, Mulaudzi & Wright, 2010:83; Ellis & Standing, 2010:12; Brink, van der Walt & van Rensburg, 2012:199; cf. Grove, Burns & Gray, 2013:38,195).

The researcher's interest to conduct a study on the primary health care environment was raised by the negative feedback received from the students and their supervisors, following the students' required primary health care clinical placements and also her interest in the students' clinical learning as nurse educators. The research question as well as the research aim, were then formulated from the research problem, to identify the focus of the study. This influenced the choice of a research design and the methodology used to collect data (Creswell, 2009:88; Grove *et al.*, 2013:3). In addition, the choice of a design was influenced by a qualitative study conducted by MacKenzie (2010) on the problems of the undergraduate student

nurses' learning experiences in primary health care clinics, where the students highlighted the negative attitudes of professional nurses and unsupportive primary health care clinical environments, which negatively impacted their learning.

3.2 RESEARCH QUESTION, AIM AND OBJECTIVE

The research question, aim and objective are considered throughout the study. The research question focuses on what the student nurses' perspectives on the primary health care practice environments in the Free State Province, were. This question is linked to the study aim, namely, to describe the primary health care practice learning environment from a student's perspective. Subsequently, the objective is to describe the perspectives of the diploma student nurses at a School of Nursing, regarding the primary health care practice learning environment.

3.3 RESEARCH DESIGN

A research design describes the researcher's decisions regarding the topic, participants of the study and the methods that will be followed to answer the research question (Babbie, 2016:117). A research design, therefore, guides the planning and implementation of the research study. The selection of a design is based on the nature of the research problem, the researcher's personal preferences and the audience for the study (Creswell, 2009:3).

In addition to the nature of the problem as stated in the introduction, the selection of the design was also influenced by a qualitative study conducted by MacKenzie (2010). The students highlighted the negative attitudes of professional nurses and the unsupportive primary health care clinical environment, as factors that had an adverse effect on their learning.

The Free State School of Nursing's students raised similar problems in their post-clinical placement evaluations. Professional nurses also voiced the same concerns, during official clinical practice meetings, held at the different campuses. The qualitative study conducted by MacKenzie (2010) on the undergraduate student nurses' learning experiences in primary health care clinics, provides a solid foundation for the current quantitative study.

The types of research designs include descriptive, correlational, quasi-experimental and experimental designs (Grove *et al.*, 2013:43). Broadly speaking, quantitative research designs include experimental and non-experimental designs (Fouché, Delport & De Vos, 2011:144; Brink *et al.*, 2012:102). Whereas experimental designs involve the intervention and control of the research setting (Fouché *et al.*, 2011:142; Grove *et al.*, 2013:214; Babbie, 2016:360,361), non-experimental designs investigate research variables as they occur in natural settings (Brink *et al.*, 2012:112; Grove *et al.*, 2013:214)

A non-experimental design was suitable for this study, as the researcher did not manipulate the research variables or the research setting in any way (Brink *et al.*, 2012:112). Non-experimental designs include descriptive and correlational designs (Brink *et al.*, 2012: 116), which are mostly utilised by nurse researchers (Grove *et al.*, 2013:214). In addition, Botma *et al.* (2010:110) asserts that “a descriptive design is a non-experimental design if the researcher wants to describe the variable of interest as it naturally occurs” and may be cross-sectional (Babbie, 2016:106). Cross-sectional studies examine data collected from different participants on one occasion (Brink *et al.*, 2012:115; Babbie, 2016:106). Ultimately cross-sectional studies are used to find out people’s opinions about an issue, and are usually undertaken for quality monitoring purposes (Ellis & Standing, 2010:79).

A quantitative, descriptive and cross-sectional design was used to describe the perspectives of diploma student nurses on the primary health care practice learning environments (Botma *et al.*, 2010:113; Fouché *et al.*, 2011:156; Grove *et al.*, 2013:215; Polit & Beck, 2017:180,206). Through a quantitative design, knowledge was generated on the primary health care practice learning environment from a student’s perspective. Unlike a qualitative design, a quantitative design allowed the researcher to approach the problem under investigation in a neutral, value free, detached, objective and systematic way (Botma *et al.*, 2010:42; Fouché & Delport, 2011:64; Grove *et al.*, 2013:24).

A descriptive design was used to provide more knowledge about the characteristics of the primary health care practice learning environment from the students’

perspectives (Brink *et al.*, 2012:112; Grove *et al.*, 2013:215). Through a descriptive design, the stated research question was answered. The design was used to provide a picture regarding clinical learning in primary health care practice environments, and to identify the challenges related to the current practice (Botma *et al.*, 2010:113; Brink *et al.*, 2012:112; Grove *et al.*, 2013:215). A descriptive design also involves a greater number of subjects and enhances the generalisation of the results (Fouché & De Vos, 2011:96).

The disadvantage of a descriptive study is that the level of information obtained may be superficial (Botma *et al.*, 2010:110). To ensure the accuracy and the adequacy of the information obtained from study participants, different sources of literature were used to select the content of the questionnaire, and the newly constructed questionnaire was reviewed by an evaluation committee, consisting of experts in the field of clinical teaching and questionnaire construction. In addition, the questionnaire was pre-tested and positive feedback was received from five third year student nurses at the School of Nursing, University of the Free State, regarding the adequacy and correctness of the content included in the questionnaire.

In addition, a cross-sectional design was used to describe the perspectives of the three groups of third year nursing students of a Free State School of Nursing on their clinical learning in primary health care practice environments. Students from the Eastern, Northern and Southern Free State Campuses were requested to participate in the study. The advantage of including students from the three campuses was to provide a description regarding the clinical learning in the entire Free State School of Nursing, as this cross-sectional study assisted the researcher to provide a comprehensive, in-depth investigation of the primary health care environments in the Free State Province (Brink *et al.*, 2012:101). Consequently, this study will be useful for planning the students' clinical placements and estimating their future needs, to improve clinical learning in primary health care practice environments.

3.4 RESEARCH TECHNIQUE

A research technique includes "the methods used to collect data, all the types of activities the participants are asked to perform and instruments used to collect data"

(Brink *et al.*, 2012:200). In quantitative studies, methods used include structured interviews and questionnaires, observation, physiological measures and scales (Botma *et al.*, 2010:133; Brink *et al.*, 2012:150; Grove *et al.*, 2013:25). The types of scales available include semantic, differential, rating, summative rating and Likert (Brink *et al.*, 2012:159). Questionnaires are administered using interviews, telephonically, Online or are self-administered (Babbie, 2016:262). Questionnaires are suitable to collect large amounts of data within a short period of time. If a questionnaire is considered to be well structured, the data that is gathered should be valid and reliable. The disadvantage related to this technique may be a low response rate and the responses may be weak (Botma *et al.*, 2010:135; Grove *et al.*, 2013:429).

The researcher chose a structured, self-administrative questionnaire, consisting of a four-point Likert scale, to obtain information from the students about the primary health care practice environment. Implementing a self-administered questionnaire addressed the fact, that the respondents were from the three campuses, situated in the Eastern, Northern and Southern Free State. Furthermore, it was not possible for the researcher to interview the large number of respondents.

The possible disadvantage of a low response rate was addressed by delivering questionnaires to the three campuses and picking them up on a specific date (Babbie, 2016:262). Lecturers handed the questionnaire to the respondents in a classroom setting. In addition, the respondents did not include their names on the questionnaire and this could have contributed to the high response rate.

To address the fact that the responses may be weak, stated guidelines were considered to formulate questions. Questions were simple and short, and phrased in an affirmative way. The guideline to group related questions was also applied (Grove *et al.*, 2013:427; Brink *et al.*, 2012:156). A cover letter, which indicated how ethical issues related to data gathering will be dealt with, and instructions on how to complete the questionnaire were made available to the respondents (Grove *et al.*, 2013:427; Brink *et al.*, 2012:156). Most importantly, the questionnaire was designed to meet the objectives of the study, the content was aligned with the research problem, question, aim and objectives (Brink *et al.*, 2012:154), and the students

acquired all the necessary knowledge and skills to respond competently (Babbie, 2016:250).

The structured, self-administrative questionnaire with predetermined response alternatives was developed from MacKenzie's (2010) qualitative study on the problems of undergraduate student nurses' learning experiences in primary health care clinics and relevant literature. The questionnaire consists of the following sections and sub-sections (refer to Table 3.1).

Table 3 1: Structure of the questionnaire

SECTION	SUB-HEADINGS	NUMBER OF QUESTIONS
1	Biographic data	3
2	Practice Learning Environment	
	Support	18
	Leadership/professional nurses	20
	Relationships	10
	Attitude	4
	Communication	9
	Human resources	5
	Material resources	3
Services	4	
3	General	1 Yes/No 2 Open-ended

The newly constructed questionnaire was reviewed by an evaluation committee, consisting of experts in the field of clinical teaching, and questionnaire development. The mentioned experts' feedback was used to improve the reliability and validity of the questionnaire. Changes to components and statements included support, leadership and relationships.

Table 3 2 Changes to the newly structured questionnaire

SECTION	NUMBER	CHANGES
2.1 Support		Lecturer added to the opening statement
	2.1.4	Informing the nurse-in-charge about learning outcomes students should achieve was shifted from 2.1.10 (on clinical placement) to 2.1.4 (prior to clinical placement) as clinical areas should be informed about learning outcomes before students are placed
2.2. Leadership	2.2.1	Showing respect towards patients and families was divided into two sub-sections, that is the patient and the patient's family member
		Examples were converted into separate statements: 2.2.1.1: Greeted patients when they arrived for consultation 2.2.1.2: Explained to patients what their current health condition entails 2.2.1.3: Discussed the patient's treatment plan with him/her
	2.2.5	Statement added: Provided health education related to home- based care to a patient's family member
	2.2.10	Developmental opportunities Examples were converted into statements to specify the type of developmental opportunities students were allowed to attend
2.3 Relationships	2.3.2	Health professions examples were converted into separate statements to specify health professionals students had the opportunity to work with

The respondents rated their description of the practice learning environment in each section using a grading scale ranging from one to four, where 4 = Strongly agree (Sa), 3 = Agree (A), 2 = Disagree (D) and 1 = Strongly disagree (Sd). Refer to 3.10 for the description on the calculation of the components.

3.5 STUDY POPULATION

Third year students from the three sub-campuses, who completed their second year clinical practice, participated in the study. The number of students registered in 2016 was used to estimate the study population for 2017:

Table 3 3 Number of respondents per campus

CAMPUS	NUMBER OF STUDENT 2016	NUMBER OF STUDENTS 2017	RESPONDENTS AND PERCENTAGE
A	45	38	37= 25.34%
B	75	51	47= 32.19%
C	72	71	62= 42.47%
TOTAL	192	160	146= 100%

3.6 PRE-TEST

The pre-testing of a questionnaire prior to the main study ensures that the respondents understand the instructions, that the content is suitable, that the allocated time to complete the questionnaire is adequate, and that the data collection technique is suitable (Botma *et al.*, 2010:275; Strydom, 2011:240- 241; Grove *et al.*, 2013:46,428). Overall, a pre-test assesses the validity and reliability of the measuring instrument with regard to correctness and consistency (Botma *et al.*, 2010:275; Strydom, 2011:240- 241; Grove *et al.*, 2013:46, 428).

Before the main study, five third year student nurses at the School of Nursing, University of the Free State, who completed their second year clinical practice in 2016, completed the questionnaire on a scheduled date. Feedback received from the students indicated that the instructions were very clear, the time allocated was adequate, the questions were clear and the content covered was complete. However, the students indicated that they were unaware of the number of students allocated per clinic, according to the agreement between the nursing school and the practice setting, that is, Section 2.6.2. This question was not removed from the questionnaire, as the ratio between the students and the professional nurses impacts negatively on the support students receive in the practice area and therefore, should be clearly communicated between the educational institutions and practice areas, including the students, as the major stakeholders in the practice learning environment. The inclusion of this question in the questionnaire can help improve the communication between educational and clinical institutions. As a result, there were

no changes made to the questionnaire. The data collected was not included in the main study, as the aim of pre-testing the questionnaire was to test a newly constructed questionnaire and identify flaws, which needed attention, before using it for the main study (Botma *et al.*, 2010:275; cf. Grove *et al.*, 2013:428).

3.7 DATA COLLECTION

Data was collected in March 2017 due to the fact that the diploma student nurses registered for their third year of training would have completed the required clinical exposure to the PHC workplace environment in 2016. These students should have mastered the competencies stated in the curriculum. The assumption was that they would be able to give adequate and accurate information, regarding each question posed in the structured, self-administrative questionnaire.

- Ethical approval to conduct this study was obtained from Health Sciences Research Ethics Committee (HSREC), University of the Free State (refer to HSREC No 05/2017). Approval was also obtained from the Dean of the Faculty of Health Sciences, the Head School of Nursing, and the Vice-Rector, Research, University of the Free State, the Principal and Heads of the three campuses of the School of Nursing, where the study was conducted (Botma *et al.*, 2010:145; Grove *et al.*, 2013:46).
- The researcher visited the sub-campus over a period of three days. The students were seen during a lecture to explain the research project to them. Thereafter, the data collection date, the information leaflet, and the informed consent were made available (refer to Annexure D). Written informed consent was obtained from each respondent during the same visit.
- To avoid the contamination of data, the researcher collaborated with the Head of School and the lecturers of each sub-campus to confirm a specific date, time and venue for the data collection. The researcher was not present during the completion of the questionnaires. This was done to minimise power coercion. The lecturers that were responsible for a class, on the scheduled date and time, were requested to avail thirty minutes of their lecture contact time in the morning session, just before the students were dismissed to take a tea break. In addition, they were asked to administer questionnaires to the

students, to clarify possible uncertainties and receive the questionnaires (Delpont & Roestenburg, 2011:189).

- The questionnaires were handed to the students by the lecturers to complete on their own. The completed questionnaires were posted in a box, provided for this purpose. Tightly sealed boxes with narrow slots cut into the lids, sufficient to accept a questionnaire, but prevent anyone from accessing the posted questionnaires, was used. The boxes were sealed with tape and kept safe in a lockable cabinet by the lecturers at the Southern and Northern Campuses. The Eastern Campus lecturer brought the box to the researcher's office immediately after completion, and the researcher in turn sealed it with tape and kept it in a lockable cabinet. The researcher gathered the boxes from the Southern Campus three days after completion and from the Northern Campus after five days.

3.8 RELIABILITY AND VALIDITY

To enhance the quality of the data that was gathered (refer to Data Collection), the questionnaire needs to be reliable and valid (refer to Research technique and Pre-test). Reliability refers to the correctness and consistency of the information obtained during the data gathering process. Reliability is determined by a questionnaire's ability to produce the same results every time it is used (Delpont & Roestenburg, 2011:177; Babbie, 2016:146; Polit & Beck 2017:179). Validity refers to the degree to which the proposed instrument measures what it is supposed to measure, that is, its authenticity (Delpont & Roestenburg, 2011:172; Babbie, 2016:148).

The reliability of the questionnaire is enhanced by revising items, that are unclear and, by ensuring the consistency during application and conducting of a pre-test, before using the questionnaire in the main study (Delpont & Roestenburg, 2011:177; Grove *et al.*, 2013:428).

The validity of the questionnaire is enhanced by ensuring that it measures the concept in question. The questionnaire was constructed to describe the perspectives of diploma student nurses, regarding the primary health care practice learning

environment. Both content and face validity were considered during the construction of the questionnaire. To address the content validity questions, that were formulated based on literature related to the topic of the research, were included. Face validity is considered when a measuring tool (questionnaire), that is well designed, actually reflects the reality of the constructs that are being measured, and also reflects what is happening within the context of the study (Brink *et al.*, 2012:166; Du Plooy-Cilliers, Davis & Bezuidenhout, 2014:256).

Research and content experts selected from the Faculty of Health Sciences (FHS), including a member of the Department of Biostatistics (FHS), were given the opportunity to review the questionnaire. The instrument was evaluated for representativeness and the misinterpretation of the content and bias (Delpont & Roestenburg, 2011:177; Brink *et al.*, 2012:166).

3.9 ETHICAL CONSIDERATIONS

Ethics was integrated in every phase of the research process (Botma *et al.*, 2010:4). The principle of respect, justice and beneficence were observed throughout the process. In addition, the researcher maintained integrity in conducting the research and observed regulations applicable to the research (Singapore statement on research integrity, 2010).

Ethical approval was obtained from the Health Sciences Ethics Research Committee (HESREC) (UFS), ethics number: HSREC 05/2017 (UFS-HSD2017/0013). Furthermore, the Head School of Nursing and Vice-rector research, (UFS), to allow third year students to participate in the pre-test of the questionnaire, the principal and the heads of the campuses of the Free State School of Nursing, to allow the students from the three campuses to participate in the study.

The right to self-determination and informed consent, based on the principle of respect for all people, was observed. Students were informed about the purpose and significance of the study, the right to ask questions and the researcher also availed the information sheet, to enable the students to make informed decisions about their participation (Refer to Addendum K). Participation in the study was voluntary,

respondents signed a written consent if they agreed to take part and they were informed about their right to withdraw from the study at any time, if they wish to do so, without any effect on their training (Refer to Addendum J). To minimise influencing the students into taking part in the study, because of power position the researcher has on the students, the researcher requested third year lecturers to administer the questionnaires to the students (Botma *et al.*, 2010:6; Brink *et al.*, 2012:36; Grove *et al.*, 2013:177; Polit & Beck, 2017:140).

The right to privacy was observed, data collection was conducted in private settings (classrooms) and the students were not coerced into sharing information (Botma *et al.*, 2010:13; Polit & Beck, 2017:147).

Anonymity and confidentiality were ensured, to protect the research respondents' right to privacy. The respondents were not expected to write their names on the questionnaire. Therefore, the researcher was not able to identify a given response with a particular student. A code was allocated to each campus and the researcher kept the code numbers in a locked cabinet (Botma *et al.*, 2010:17-18; Grove *et al.*, 2013:172; Babbie 2016:65). The information shared by the respondents was kept confidential and only accessed by the people involved in the study (Botma *et al.*, 2010:19). The anonymity offered may have improved the honesty with which the students answered the questions (Botma, *et al.*, 2010:135).

The right to fair selection and treatment is based on the principle of justice. As already indicated, the participation in the study was voluntary (Grove *et al.*, 2013:173; Polit & Beck, 2017:141). The researcher adhered to the research protocol and the information stated in the information leaflet.

The right to protection from harm and discomfort is based on the principle of beneficence, which holds that the researcher should do good and above all, minimise harm (Grove *et al.*, 2013:174). The choice of the students who participated in the study, that is, third years, was based on the requirements of the study (Polit & Beck, 2017:141). There were no direct benefits for the respondents or remuneration for participating in the study, however, the information obtained from the respondents can help improve the education of the students during clinical placement and could

consequently improve clinical competence (Grove *et al.*, 2013:176; Polit & Beck, 2017:139).

3.10 DATA ANALYSIS

The researcher coded data provided in the structured self-administrative questionnaires and captured the data in a Microsoft Excel spreadsheet. Analysis of the open-ended questions was done by coding and summarising the responses into those that hindered clinical learning, those that promoted clinical learning, and those that the students indicated should be improved to enhance clinical learning. The questionnaires spreadsheet and open-ended questions coding list were sent to the supervisor who re-checked the electronic data to ensure quality. Thereafter, the spreadsheet was forwarded by electronic mail to a biostatistician in the Department of Biostatistics, UFS, who assisted in the data analysis. Statistical Analysis Software (SAS) computer software was used to analyse the data. Descriptive statistics, namely means and standard deviations or medians and percentiles, were calculated for continuous data. Frequencies and percentages were calculated for categorical data. The comparison between the campuses and an appropriate T-test was calculated (Brink *et al.*, 2012:179; Grove *et al.*, 2013:538).

3.11 VALUE OF THE STUDY

The study aims to describe the primary health care practice learning environment from a student's perspective and therefore, the research results should benefit the students and the nursing profession as a whole. It helps identify factors in the primary health care learning environment, which facilitates or inhibits clinical learning, assists the nursing education institutions and PHC facilities to identify problems in their clinical education, and lecturers and professional nurses to play their supportive and supervisory roles effectively. These extended roles can in turn create opportunities for the students to integrate theory and practice, increase their clinical skills and become competent professional nurses. A questionnaire developed may be used periodically by the students, lecturers and professional nurses in the practice settings, as a tool to measure the conduciveness of the practice learning environment in other primary health care settings.

3.12 SUMMARY

This chapter presents the steps of the research process followed in the study. A detailed description of the research design, which guided the study, the research technique, study population, data collection and ethical considerations were presented. In Chapter 4 data analysis will be presented.

CHAPTER 4

RESULTS

4.1 INTRODUCTION

The previous chapter presented the research methodology which guided the study, including the design and technique used to collect and analyse the data. This chapter provides a description of the results obtained through data collected from third year nursing students at a Free State School of Nursing.

A description of the results obtained by means of a questionnaire demonstrated that the aim of the study, that is, to describe the primary health care practice learning environment from the students' perspective has been addressed. The objectives of the study, namely to describe and compare the perspectives of diploma student nurses at the Free State School of Nursing regarding the primary health care practice learning environment, have also been achieved.

4.2 STATISTICAL ANALYSIS AND RESULTS

The researcher managed data obtained from the questionnaire as follows:

- *Statements*

The rating allocated by a respondent related to a statement in the questionnaire was captured electronically on a Microsoft Excel® spreadsheet.

- *Open-ended questions*

The responses on the open-ended questions were coded and summarised into those that hindered clinical learning; those that promoted clinical learning, and those that the students indicated should be improved to enhance clinical learning. Following the coding of responses, the data were captured in the same Microsoft Excel® spreadsheet.

The spreadsheet was submitted to a biostatistician at the biostatistics division in Health Sciences. The data was then analysed using descriptive statistics that involved using means and frequency procedures to describe and summarise data (Brink *et al.*, 2012:177, 180).

The sequence of sections such as support and leadership, as well as statements included in the questionnaire, served as a framework for the discussion on the results. The results are presented in figures and tables. The tables show percentages scored on the statement using a four-point Likert scale, and the combined percentages for ratings on strongly agree and agree, and disagree and strongly disagree. In the discussion, the highest, lowest ratings and means calculated for each of the above combinations are mentioned. Thereafter, only certain percentages calculated for the statements are highlighted by the researcher, and supported by literature. In this discussion, either students and / or respondents are referred to in the description of the results.

For continuous data, namely the age, the median was calculated. Frequencies and percentages were calculated for categorical data such as gender, the campus where the students are registered, support, leadership, relationships, attitude, communication, human and material resources, services and general issues. (Refer to Table 4.1 for the characters used during the interpretation of the results).

Table 4 1 Characters used during interpretation of results

N=	Total number of respondents included in the study
n=	Number of respondents that responded to a specific question
f=	Frequency

4.3 BIOGRAPHIC DATA

The biographic data comprised of the age and gender of the study population, and the campus where the students received training.

4.3.1 AGE OF THE RESPONDENTS N=146

Table 4.2 shows the age of the 146 students who participated in the study. The oldest respondent was 49 years of age and the youngest 20 years of age. The median age was 26 years.

Table 4 2 Age of the respondents

AGE OF THE STUDY POPULATION					
N	Median	Lower Quartile	Upper Quartile	Minimum	Maximum
146	26	23	30	20	49

A Free State School of Nursing's student population mostly consists of students who have applied for admission immediately after completing matric, and a few enrolled nursing assistants who are employees from the Department of Health. These employees could have contributed to the maximum age of this study population.

4.3.2 GENDER OF RESPONDENTS N=146

Out of 146 of respondents the majority, 78.8% (n=115) were females, and 21.2% (n=31) males. Refer to Figure 4.1.

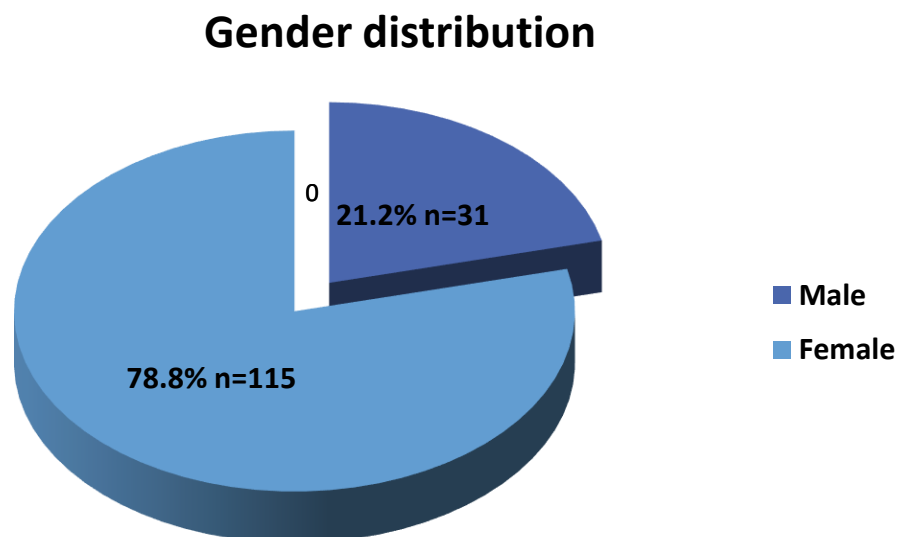


Figure 4 1 Gender distribution of respondents

Yearly, the number of females who apply for admission to the four year nursing programme presented at a Free State School of Nursing is higher, when compared to the male students who register. This is possibly because nursing is still seen as a feminine profession (Hess, 2012: 35). Though the number of males in the profession is gradually increasing, the percentage of males represents only 8% of the nursing population in the United States (National Council of State Boards & The National Forum of State Nursing Workforce Centres, 2016: Online). In South Africa, the total number of females who register for training as students on a yearly basis is higher than that of males, with a ratio varying between 1: 2.99 and 1: 3. 22, from 2012 to 2016 (SA Nursing Council Statistics, 2012-2016). Refer to Table 4.3.

Table 4 3 S.A student population according to gender (SA Nursing Council Statistics, n.d)

Description	2012		2013		2014		2015		2016	
Gender	M	F	M	F	M	F	M	F	M	F
Numbers	4844	16076	4955	16001	5217	16086	5154	15404	5257	16082
Ratio	1: 3.4		1: 3.22		1: 3.09		1: 2.99		1: 3.06	

4.3.3 REPRESENTATION OF RESPONDENTS PER CAMPUS N=146

Figure 4.2 shows the total number of students who participated in the study from the East, North and Southern Campuses. Thirty-seven (25.3%) of students represented Campus A, 47(32.2%) Campus B, and 62 (42.5) Campus C.

Respondents per campus

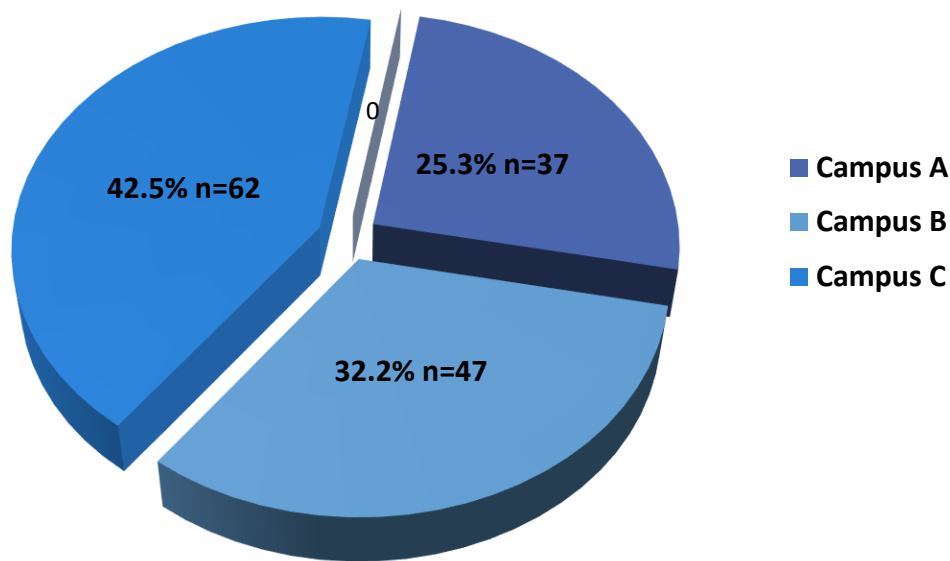


Figure 4.2 Representation of respondents per campus

The total number of third year students registered at the three campuses varied (N=160). Campus A (N=37) with the smallest number of students, followed by Campus B (N= 51) and Campus C showing the largest number of students (N=71). This indicates that most students participated in the study, with a response rate of 91.25%.

4.4 RATING OF THE PRACTICE LEARNING ENVIRONMENT

This section summarises how third year students rated the PHC practice learning environment using a 4-point Likert scale. Refer to Sections 2 and 3 in the questionnaire. Section 2 included statements related to support (18), leadership (20), relationships (10), attitude (4), communication (9), human resource (5), material resources (3), and services rendered in this learning environment (4). Section 3: General questions included one closed-ended and one open-ended question. Tables include the percentages scored on each statement, using a four-point Likert scale.

NOTE: Results are described using cumulative percentages converted to one decimal point.

4.4.1 SUPPORT N=146

4.4.1.1 Summary of the level of support before clinical placement

The level of support students reported to have received before clinical placement is described. In the category, strongly agree and agree, cumulative ratings related to the support before placements ranged from 71.3% to 95.9%, with a mean of 89.6%. Ratings for strongly disagree and disagree varied between 4.1% and 28.7%, with a mean of 10.4%. Refer to Table 4.4.

4.4.1.2 Theoretical knowledge prior to clinical placement

Almost 96% (95.9 %: n=140) of the students strongly agreed or agreed that the lecturers ensured that they had received theoretical knowledge, prior to their clinical placement. A much lower percentage (4.1%, n=6) strongly disagreed or disagreed that they had received theoretical knowledge, before their placement. The results show that lecturers had adequately prepared the students, before placement. On the other hand, a much lower percentage (71.4%) of the students reported to have been theoretically prepared in a study conducted by Xaba (2015:79). Adequate theoretical knowledge assisted the students to comprehend the basic principles related to the clinical procedures and therefore, enhanced the application of theory into practice (Botma & MacKenzie 2016:108).

4.4.1.3 Learning opportunities, roles and responsibilities

Regarding learning opportunities, roles, and responsibilities: A very high percentage ranging from 95.2% (n=139) to 95.9% (n=140) strongly agreed or agreed, that they had been briefed on the learning opportunities and informed of their roles and responsibilities. Providing the students with adequate information on the learning opportunities, their roles and responsibilities, and assessment documents needed for each period of practice learning, optimised the learning in the practice learning environment (Standards and principles of practice learning NMC (2011) cited in Hughes & Quinn, 2013:366).

Table 4 4 Support prior to placement for clinical learning in a PHC practice learning environment N=146

Statement on support prior to placement	% Strongly agree	% Agree	Cumulative % / f=	% Disagree	% strongly Disagree	Cumulative %/f=
1. Ensured that students receive the necessary theoretical knowledge	42.47	53.42	95.9 n=140	4.11	0	4.1 n=6
2. Briefed on learning opportunities	45.89	50.00	95.9 n=140	4.11	0	4.1 n=6
3. Informed of roles and responsibilities	49.32	45.89	95.2 n=139	4.11	0.68	4.8 n=7
4. Informed the nurse-in-charge about learning outcomes I have to achieve	29.45	41.78	71.3 n=104	23.97	4.79	28.7 n=42
Mean value all statements			89.6			10.4

4.4.1.4 Professional nurses knowledge about students' learning outcomes

Regarding the knowledge professional nurses had about the students' learning outcomes, 71.3% (n=104) strongly agreed or agreed, that the lecturers had informed the nurse-in-charge about the learning outcomes they had to achieve, 28.7% (n= 42) had disagreed on this issue.

The fact that almost 29% (28.7%) of the students disagreed that the nurse-in-charge had been informed about the students' learning outcomes raised a concern. Adequate preparation of the nurse in charge, including all the clinical staff involved in the practice learning, was necessary to assist all the students to meet the clinical learning outcomes (Papastavrou *et al.*, 2016:8). Failure to communicate the learning outcomes students had to achieve reduced the ability of the nurse-in-charge to support the students in meeting their learning outcomes and consequently reduced the students' ability to learn. A study conducted by Bos *et al.* (2015:7) confirmed that inadequate communication between the supervisors in the PHC clinical environment

and the lecturers, regarding students learning, impacted on the supervisors' ability to prepare and give the students a good start.

4.4.1.5 Summary of the support received on commencement of clinical placement

Results in Table 4.5 show the support the students reported to have received on the commencement of their clinical placement. Ratings for strongly agree and agree in this section varied between 79.5% and 93.8%, with a mean of 85.4% positive responses. The percentages for strongly disagree and disagree ranged from 6.2% to 20.5%. Students gave a mean percentage of 14.6% negative responses.

Table 4.5 Support rendered on students commencement of placement for clinical learning in a PHC practice learning environment N=146

Statements on support rendered on commencement of clinical placement	Strongly agree	Agree	Cumulative %/f=, n=	Disagree	Strongly Disagree	Cumulative %/f=
5. Administrative staff greeted me politely	21.92	57.53	79.5 n=116	17.12	3.42	20.5 n=30
6. Nursing Staff welcomed me	29.45	63.70	93.2 n=136	4.79	2.05	6.8 n=10
7. I was introduced to the rest of the team members	30.82	49.32	80.1 n=117	17.12	2.74	19.9 n=29
8. I received orientation	45.21	48.63	93.8 n=137	5.48	0.68	6.2 n=9
9. I learned what the team members expected of me	28.77	51.37	80.2 n=117	13.01	6.85	19.8 n=29
Mean value all statements			85.4			14.6

4.4.1.6 Greeted and welcomed by administrative staff

One hundred and sixteen students 79.5% stated that they were politely greeted by the administrative staff and 20.5 % (n= 30) disagreed. Unlike a hospital setting, the clinic administrative staff worked closely with the nursing personnel and supported them with the administrative issues such as record keeping. Therefore, the

researcher believed that their attitude towards the students possibly had an influential role in the students' learning.

A very high number of students, 93.2% (n=136) agreed that the nursing staff welcomed them and 80.1% (n=117) agreed, that they had been introduced to the rest of the team. An environment where the students felt welcome encouraged them to work freely and ask for guidance appropriately (Xaba, 2015:3). However, n=29 students (19.9%) disagreed that they had been introduced to the rest of the team members. Negative reactions on the first day in the practice environment greatly affected the students' motivation to learn (Dale, Leland & Dale, 2013:2).

4.4.1.7 Orientation on commencement of clinical placement

Regarding orientation, a very high number of students 93.8% (n=137) strongly agreed or agreed, that they had received orientation on the commencement of their clinical placement. The orientation of the students was extremely important, as learning was enhanced in an environment where the students were welcomed and received orientation on the commencement of their clinical placement (Darcy Associates Consulting Services 2009:76). Furthermore, a high percentage (80.2%, n=117) of the students indicated that they had learned what the team members expected of them, twenty-nine students (19.8%) responded negatively.

4.4.1.8 Summary of the support received during clinical placement

Results in Table 4.6 show the support students reported having received during their clinical placement. Cumulative percentages for this section of the questionnaire related to strongly agree and agree were between 56.9% to 86.3%, and a mean of 75.6%. The range for positive statements was lower, than that indicated for support before and on the commencement of placement. A study conducted by Donough (2014:44) on the perceptions of the undergraduate students on their clinical supervision confirmed that the students had experienced inadequate supervision by the lecturers and clinical supervisors during clinical placement. Higher percentages were calculated for negative ratings, that is, strongly disagree and disagree. Percentages ranged from 13.7% to 43.1%. Twenty-eight (19.2%) of the students disagreed that they had been adequately supervised during clinical placement. Considering the impact supervision had on the students' clinical learning, all the

students deserved adequate supervision in clinical environments. Through supervision, the nursing students acquired and refined their clinical skills (Tiwaken. 2015:70).

Table 4 6 Support rendered during clinical placement N=146

Statements on support rendered during clinical placement	Strongly agree	Agree	Cumulative %/f=	Disagree	Strongly Disagree	Cumulative %/f=
10. Adequate supervision provided by professional nurses	34.93	45.89	80.8 n=118	17.12	2.05	19.2 n=28
11. Professional nurses made suggestions on how to improve clinical performance	22.60	43.84	66.4 n=97	29.45	4.11	33.6 n=49
12. Clinical support to address my learning needs was rendered by a lecturer/ clinical teacher	34.93	51.37	86.3 n=126	11.64	2.05	13.7 n=20
13. A professional nurse always supervised me when I was consulting a patient	21.92	34.93	56.9 n=83	34.25	8.90	43.1 n=63
14. A professional nurse always supervised me when I was performing a clinical procedure	21.23	43.84	65.1 n=95	28.77	6.16	34.9 n=51
15. I experienced the practice environment as nurturing	22.60	56.16	78.8 n=115	17.12	4.11	21.2 n=31
16. I was encouraged to reflect on my actions	14.38	65.75	80.1 n=117	17.81	2.05	19.9 n=29
17 I was encouraged to take initiative regarding daily nursing activities	26.03	58.90	84.9 n=124	13.01	2.05	15.1 n=22
18. I found that the nursing care was aligned to what I have learned in theory.	36.30	44.52	80.8 n=118	16.44	2.74	19.2 n=28
Mean value all statements			75.6			24.4

4.4.1.9 Advise received on how to improve clinical performance

Even more students (33.6%, n=49) reported that they had not been advised by the professional nurses on how to improve their clinical performance. The fact that

almost 34% of the respondents responded negatively to this issue raised a concern, considering the fact that the students needed guidance from the professional nurses on how to perform nursing activities. As nurses on training, all the students should always receive feedback on their performance. A comprehensive feedback did not only give feedback on what a student had done or had not done well, but also identified how the student could improve (Hughes & Quinn, 2013:293), including alternative ways of behaving or performing tasks (NDoH, 2009:3.6).

4.4.1.10 Supervision when consulting patients or performing a clinical procedure

Clinical support from the lecturers / clinical teachers assisted the nursing students to cope better in the practice learning environment (Motsilanyane, 2015:38). Therefore, it was crucial that the lecturers or clinical teachers had adequately supported all the nursing students during clinical placement. In this study, 63 students (43.1%) reported that they had not received supervision when they had been tasked to consult patients. Eighty three students (56.9%) reported having received supervision when consulting patients. Furthermore, 95 students (65.1%) reported that they had been supervised when they had performed a clinical procedure, while 51 students (34.9%) had responded negatively. The number of students who responded negatively was a concern, when the impact supervision had on the students' clinical learning was considered. Student nurses did not possess adequate knowledge and skills on how to perform clinical tasks and gradually acquired the knowledge and skills as they progressed from one level to another (Jooste, 2016:120). Therefore, they should have always worked under the supervision of the professional nurses when they had performed clinical procedures or consulted patients.

4.4.1.11 Encouragement to take initiative when performing activities

On the positive side, 124 (84.9%) of students indicated that they had been encouraged to take the initiative when they performed daily nursing activities. One hundred and fifteen students (78.8%) had experienced the practice environment as nurturing, and 80.1% (n=117) strongly agreed or agreed that they had been encouraged to reflect on their actions. A nurturing practice learning environment greatly influenced the students' learning. A similar study conducted by Bos *et al.*

(2015:171) confirmed that the students' high level of motivation to learn was strongly associated with a nurturing atmosphere.

4.4.2 LEADERSHIP N= 146

The scores of students regarding twenty statements on leadership can be viewed in table 4.7. Cumulative ratings for strongly agree and agree regarding in the subsection addressing the respect professional nurses had shown towards patients varied between 65% and 87.7% with a mean of 75.4%. Ratings for strongly disagree and disagree ranged from 12.3% to 35% with a mean of 24.6%. A very high number of students, 87.7% (n= 128) reported that professional nurses had greeted the patients when they arrived for consultation and only 12.3% (n=28) responded negatively. The results showed that the principle of courtesy had mostly been observed (Vasuthevan & Mthembu, 2016:36). However, a small percentage of students had disagreed that the professional nurses had greeted the patients.

Table 4 7 Ratings by students related to statements on leadership

Professional nurses showed respect towards patients	% Strongly agree	% Agree	Cumulative %/f=	% Disagree	% Strongly Disagree	Cumulative %/f=
1. Greeted the patients when they arrived for consultation	41.1	46.6	87.7 n=128	9.6	2.7	12.3 n=28
2. Explained to patients what their current health condition entails	21.2	53.4	74.6 n=109	21.9	3.5	25.4 n=37
3. Discussed the patient's treatment plan with him/her.	17.8	47.3	65.0 n=95	28.1	6.9	35.0 n=51
4. Explained to patients how their prescribed treatment/ medication works.	24.0	48.0	72.0 n=105	23.3	4.7	28.0 n=41
5. Gave health education	20.56	56.9	77.5 n=113	19.9	2.7	22.5 n=33
Mean value all statements			75.4			24.6

Professional nurses showed respect to a patient's family member(s): They	% Strongly agree	% Agree	Cumulative %/f=	% Disagree	% Strongly Disagree	Cumulative %/f=
6. Greeted family member(s) when they accompanied the patient	23.3	58.9	82.2 n=120	14.4	3.4	17.8 n=26
7. Explained to family member(s) what the patient's current health condition entails	14.4	48.0	62.4 n=91	28.1	9.5	37.6 n=55
8. Discussed the patient's treatment plan	10.96	46.58	57.5 n=84	35.62	6.85	42.5 n=62
9. Explained to a family member how the patient's prescribed treatment/ medication works	13.7	52.1	65.8 n=96	26.0	8.2	34.2 n=50
10. Provided health education related to home- based care	13.70	55.48	69.2 n=101	23.97	6.85	30.8 n=45
11. Were passionate or enthusiastic in their service delivery	13.01	56.1	69.2 n=101	23.97	6.85	30.8 n=45
12. Protected patients' rights such as safety and dignity	18.5	58.9	77.4 n=113	19.2	3.4	22.6 n=33
13. Delivered high standard of care	12.3	54.8	67.1 n=98	29.5	3.4	32.9 n=48
14. Shared their expertise such as knowledge and skills	20.6	57.5	78.1 n=114	19.2	2.7	21.9 n=32
15. Acted as role models	15.1	50.0	65.1 n=95	30.8	4.1	34.9 n=51
16. Maintained a professional appearance (uniform, epaulettes, qualification bars, broach and name tags)	27.4	49.3	76.7 n=112	17.1	6.2	23.3 n=34
17. Encouraged me to become a competent professional nurse	37.0	50.7	87.7 n=128	9.6	2.7	12.3 n=18
Mean value all statements			71.5			28.5

Allowed me to attend development opportunities such as:	% Strongly agree	% Agree	Cumulative %/f=	% Disagree	% Strongly Disagree	Cumulative %/f=
18. Meetings	15.1	36.3	51.4 n=75	32.9	15.7	48.6 n=71
19. In- service education	15.1	41.8	56.8 n=83	28.1	15.1	43.2 n=63
20. Clinical demonstrations	27.4	52.7	80.1 n=117	11.0	8.9	19.9 n=29
Mean value all statements			62.8			37.2

4.4.2.1 Professional nurses explained health condition to patients

A high percentage of students, 74.6% (n= 109) strongly agreed or agreed that the professional nurses had explained to the patients what their current health condition entailed. However, 25.4% (n=37) of the students who disagreed or strongly disagreed was of concern. A much lower percentage of the students, 65% (n= 95), agreed that the professional nurse had discussed the patient's treatment plan with them, while almost 35%, that is, 34.9 % (n=51) of the students responded negatively. On the other hand, a higher percentage, 72% (n=105) of the students agreed that professional nurses had explained to patients how their prescribed treatment/ medication works and 28% (n=41) had responded negatively. A difference of almost 6%, that is, 5.9% (n=10) between the former and the latter statements was of concern, looking at the fact that patients would have been in a better position to understand how the treatment worked, if the treatment plan was first discussed with them.

4.4.2.2 Professional nurses provided health education

A high number of students, 77.4% (n=113) strongly agreed or agreed that professional nurses gave health education while 22.5% (n=33) disagreed. The fact that 22.5% (n=33) to 35% (n=51) of the students disagreed or strongly disagreed that professional nurses had shared information related the patient's condition with them was of concern. Sharing information related to patients' condition, treatment plan, how their prescribed treatment works, including health education enabled patients participate in their care, make informed decisions and take the responsibility to comply with the prescribed treatment (Vasuthevan & Mthembu, 2016:37).

Students' ratings in the category of strongly agree or agree addressing the respect professional nurses had shown to a patient's family member(s) ranged between 87.7% and 65%, with a mean of 75.4%, which is slightly lower than that of the respect professional showed towards patients.

4.4.2.3 Professional nurses greeted the family and explained to the family member(s) what the patient's health condition entails.

A high percentage of students 82.2 % (n= 120) strongly agreed or agreed that the professional nurses had greeted family member(s) when they accompanied the

patient, however, the percentage is lower compared the number of students who stated that the professional nurses had greeted the patient, that is, 87.7% (n=128) A much lower percentage, 62.4% (n=91) of students strongly agreed or agreed that the professional nurses had explained to the family member(s) what the patient's current health condition entailed, while 37.6% (n=55) had responded negatively. Compared to a 74.6% (n=109) who reported that the professional nurses had explained to patients what their current health condition involved, this percentage was 12.2% (n=18) lower.

4.4.2.4 Professional nurses discussed treatment plan with patient's family

Almost half of the students, 57.5% (n=84) strongly agreed or agreed that the professional nurses had discussed the patient's treatment plan with the family and 42.5% (n=62) disagreed. This percentage is much lower compared to the 65% (n=95) who reported that professional nurses had discussed the treatment plan with patients. Only 65.8% (n=96) of the students reported that professional nurses had explained to the family how the patient's prescribed treatment/ medication works, while 34.2% (n=50) responded negatively. Once more, this score was much lower compared to the number of students 72% (n=105), who had rated the same statement on the patient's side. In addition, 69.2% (n=101) of students strongly agreed or agreed that the professional nurses had provided health education related to home- based care, while 30.8% (n=45) disagreed, compared to 77.5% (n=113) score of the same statement on the patient's side.

4.4.2.5 Professional nurses shared information on patient's condition with family

Overall, the percentage of students that strongly disagreed or disagreed that the professional nurses had shared information related to the patient's condition with family members ranged between 30.8% (n= 45) and 42.5% (n=62), which raised a concern, considering the importance of including family members in patient care. Involving family members enhanced a comprehensive/ holistic care of patients, as they belonged to their families (Vasuthevan & Mthembu 2016: 41; Peters, McInnes, & Halcomb, 2015:178). Furthermore, Peters et al. (2017:178) highlighted that experienced primary healthcare nurses viewed good relationships with patients, and their involvement crucial in providing effective healthcare.

4.4.2.6 Professional nurses were passionate and/or enthusiastic regarding service delivery

Hundred and one students 69.2% (n=101) stated that the professional nurses were passionate (enthusiastic) in their service delivery while 30.8% (n=45) gave a negative response. Almost the same number of students, that is, 67.1% (n=98) strongly agreed or agreed that professional nurses had delivered high standard of care and 32.9% (n=48) responded negatively. It was crucial for professional nurses to be passionate about their service delivery and provide high standards of care. As role models, their attitudes and values greatly impacted on students' learning (Bos Alinaghizadeh, Saarikoski & Kaila 2014:171). In the practice learning environment students learned and developed clinical competence (Tiwaken, Caranto & David, 2015:69) as they worked hand in hand with professional nurses.

4.4.2.7 Professional nurses protected patients' rights such as safety and dignity

Most students, 77.4% (n=113) strongly agreed or agreed that professional nurses had protected patients' rights such as safety and dignity, and few, 22.6% (n=33) disagreed. According to the Patients' Rights Charter, health workers must protect every patient's rights (Vasuthevan & Mthembu, 2016:37). Furthermore, more students, 76.7% (n=112) strongly agreed or agreed that the professional nurses had maintained a professional appearance (uniform, epaulettes, qualification bars, broach and name tags) whereas 23.3% (n=34) disagreed. As part of their rights, every patient must be treated by named health workers (Vasuthevan & Mthembu, 2016:37) and professional nurses' appearance also helps socialise students in the profession.

4.4.2.8 Professional nurses shared their expertise such as knowledge and skills with students

A high number of students, 78.1% (n=114) strongly agreed or agreed that professional nurses had shared their expertise with them such as knowledge and skills, while 21.9% (n=32) disagreed. The results are congruent with findings of the study conducted by Peters et al. (2015:179), where students reported that community nurses genuinely shared their time and expertise. However, a number of

students who responded negatively raised a concern, considering the fact that in the primary healthcare practice learning environment professional nurses are mainly responsible for PHC service provision (Botma & MacKenzie, 2016:104). Sharing their expertise with students helped them acquire the knowledge, skills and attitudes needed for them to become competent future professional nurses (Papastavrou *et al.*, 2016:8).

4.4.2.9 Professional nurses acted as role models

More students, 65.1% (n=95) reported professional nurses had acted as role models and 34.9% (n=51) disagreed. The fact that almost 35% of the students responded negatively raised a concern. This findings are in agreement with a study conducted De Swart (2013:162) where students raised a concern about the type of behaviour displayed by some professional nurses. Good role modelling by professional nurses assisted students to learn about caring and promoted a sense of responsibility (Ma, Li, Liang, Bai & Song, 2014:3; Henderson, Briggs, Schoonbeek & Paterson, 2011:196) and developed their professional identities (Bos, 2014:9).

4.4.2.10 Attendance of developmental opportunities by students

Regarding the attendance of development opportunities, almost half of the students, 51.4% (n=75) strongly agreed or agreed that they had been allowed to attend meetings, while 48.6% (n=71) disagreed. A high number of students who responded negatively raised a concern. Meetings that were held by PHC facility supervisor with the clinical staff could have benefited both the staff and students on training. Almost 57%, that is 56.8 % (n= 83) of students strongly agreed or agreed that they had been allowed to attend in-service education while 43.2% (n=63) disagreed. Like meetings, in-service education such as trainings where health care personnel were updated on new developments related to PHC service provision (NDoH, 2009:2.4), benefited both the staff and students. Therefore, a high number of students who responded negatively was of concern. On a positive side, a very high number of students, 80.1% (n=117) strongly agreed or agreed that they had been given the opportunity to attend clinical demonstrations. It is imperative to provide opportunities for students to attend clinical demonstrations where new procedures are shown (Hughes & Quinn 2013:361) A study conducted by Lawal, Weaver, Bryan and Lindo (2016:34)

confirms that 96.1% of the students agreed that they had learned best when a demonstration was facilitated in the clinical area.

4.4.3 RELATIONSHIPS N=146

Students' responses on relationships they had with other members of the multidisciplinary team in the PHC practice learning environment are described in this section (Refer to table 4.8). In the category 'strongly agree' and 'agree', cumulative percentages varied between 89.7% (n=131) and 25.3% (n=37), and between 74.7 (n= 109) and 16.4% (n=24) in the category of 'disagree' and 'strongly disagree'. The mean was 55.5% in the category 'strongly agree' and 'agree', and 44.5% in the category 'strongly disagree' and 'disagree'. On the whole, the relationship students reported to have had with different members of the multidisciplinary team raised a concern. Students need support from various team members to be adequately prepared for their professional role (Embo et al., 2015:344).

Table 4 8 Students' rating on relationships in the PHC environment

Statements on relationships with the multidisciplinary team members	Strongly agree	Agree	Cumulative %f=	Disagree	Strongly Disagree	Cumulative %f=
1. I was allowed to be actively involved in rendering PHC services as a junior member of the nursing team	36.99	52.74	89.7 n=131	8.22	2.05	10.3 n=19
2. I was given the opportunity to work with medical practitioners	26.71	41.10	67.8 n=99	24.66	7.53	32.2 n=47
3. I was given the opportunity to work with social workers	7.53	24.66	32.2 n=47	55.48	12.33	67.8 n=99
4. I was given the opportunity to work with pharmacists	15.07	34.25	49.3 n=72	40.41	10.27	50.7 n= 74
5. I was given the opportunity to work with nutritionists/dieticians	10.96	26.71	37.7 n=55	48.63	13.70	62.3 n=91
6. I was given the opportunity to work with occupational therapists	6.85	26.03	32.9 n=48	51.37	15.75	67.1 n=98
7. I was given the opportunity to work with physiotherapists	16.44	36.99	53.4 n=78	34.25	12.33	46.6 n=68
8. I was given the opportunity to work with optometrists	4.79	20.55	25.3 n=37	58.90	15.75	74.7 n=109

Statements on relationships with the multidisciplinary team members	Strongly agree	Agree	Cumulative %/f=	Disagree	Strongly Disagree	Cumulative %/f=
9. I felt welcomed by the team members during my PHC placement	21.33	62.33	83.6 n=122	13.70	2.74	16.4 N=24
10. I was supported by the team members as a junior member of the nursing team	17.81	65.07	82.9 n=121	14.38	2.74	17.1 n=25
Mean value all statements			55.5			44.5

4.4.3.1 Received the opportunity to work with medical doctors

Regarding relationships with the PHC multidisciplinary team members, the majority of student 67.8 % (n=99) reported to have had the opportunity to work with medical doctor as compared to other members of the multidisciplinary team. This may possibly be because medical doctors' sessions at the clinic are more (weekly) as compared to that of other members. However, percentage that responded negatively 32.2% (n=47) was of concern, considering the fact that medical practitioners are responsible for the provision of PHC curative services (Vasuthevan & Mthembu, 2016:56). Sharing their knowledge with students increased students' ability to diagnose and treat diseases.

4.4.3.2 Received opportunity to work with physiotherapists and occupational therapists

A lower percentage of the students, 53.4% (n=78) strongly agreed or agreed that they had had the opportunity to work with physiotherapists while 46.6% (n=68) responded negatively. A much lower percentage, only 32.9 % (n=48) of the students stated that they had had the opportunity to work with occupational therapists while 67.1% (n= 98) disagreed or strongly disagreed. Exposing students to rehabilitative services was as important as exposing them to curative services provided by the visiting medical doctor in PHC facilities. Rehabilitative personnel (physiotherapist and occupational therapist) assist with early detection of disability, ensure that further deterioration is prevented and that the remaining capabilities are fully utilized (NDoH, 2009:5.82; Vasuthevan & Mthembu, 2016:43).

4.4.3.3 Opportunity to work with social workers

Similarly, a very low percentage of the students, 32.2% (n=47) of the students stated that they had had the opportunity to work with social workers whilst a very high percentage of 67.8% (n=99) responded negatively. Working with social workers was important for all students, as they could learn how to assist health care users with social problems, including counselling skills.

4.4.3.4 Opportunity to work with pharmacists

Almost half 49.3% (n=72) of the students strongly agreed or agreed that they had had the opportunity to work with pharmacist and 50.7% (n=74) disagreed or strongly disagreed. Pharmacists at PHC facilities are involved in the provision of preventative, promotive and curative care (Vasetheuvan & Mthembu, 2016:56).

4.4.3.5 Opportunity to work with optometrists

A lowest percentage, 25.3% (n=37) of the students strongly agreed or agreed that they had had the opportunity to work with optometrists whilst 74.7% (n=109) strongly disagreed or disagreed. This is possibly because optometrists do not visit the clinic in some areas, and instead patients who needed their services are referred to the hospital.

4.4.3.6 Allowed to be actively involved in nursing care

On the positive side, almost 90% of respondents, 89.7% (n=131) strongly agreed or agreed with that they had been allowed to be actively involved in rendering nursing care while 10.3% (n=19) strongly disagreed or disagreed. The score indicates that they environment promoted active participation. Allowing students to become actively involved in nursing activities motivated them to communicate better, to practice and improve their diagnostic skills (AlHaqwi & Taha, 2015:99) and to become competent nurses (Bos, 2014:9).

4.4.3.7 Felt welcomed by the team members

Furthermore, a high percentage of students, 83.6% (n=122) had felt welcomed by the team members and 16.4% (n=24) strongly disagreed or agreed. In a study conducted by Papastavrou *et al.* (2016:6) more students emphasized that being

awaited and welcomed in the practice learning environment had influenced them to have a positive start and enhanced their learning. Almost the same number of students, 82.9% (n=121) strongly agreed or agreed that they had been supported by the team members while 17.1% (n=25) felt that they had not been supported. The support students received assisted them to integrate theory and practice (Dale & Dale, 2013:3). Therefore, a small percentage that reported not to have been supported raised a concern.

On the whole, several studies confirm that students considered relationships with the clinical staff as the most important factor influencing their clinical learning in the practice learning environment (Papathanasiou, Tsaras & Sarafis, 2014:59; Bos, 2014:10; Msiska, Smith, Fawcett & Munkhondya, 2015:475; Lawal, Weaver, Bryan & Lindo, 2016:34).

4.4.4 ATTITUDE N=146

Students' ratings on statements regarding the attitude in the primary healthcare practice learning environment are shown in table 4.9. Cumulative percentages classified under 'strongly agree' and 'agree; range from 85.6% (n=125) to 74% (n=108), with a mean agreement score of 80.0%. Under 'disagree' and 'strongly disagree', cumulative percentages range from 26% (n=38) and 14.4% (n=21), with a mean of 20.0%. Considering the impact a positive attitude had on students' clinical learning, it is imperative that professional nurses displayed a positive attitude towards all students. Professional nurses with a positive attitude, who were approachable and helpful to students, motivated them to learn and assisted them to develop a positive self-esteem (Hughes & Quinn, 2013:268).

Table 4 9 Students' rating on attitude in the PHC environment

Statements on the attitude towards students	Strongly agree	Agree	Cumulative %/f=	Disagree	Strongly Disagree	Cumulative %/f=
1. The atmosphere was pleasant for clinical learning	19.86	62.33	82.2 n=120	15.75	2.05	17.8 n=26
2. The staff was approachable towards students	17.81	60.27	78.1 n= 114	18.49	3.42	21.9 n=32
3. I received recognition for my contribution to patient care	18.49	55.48	74.0 n=108	19.86	6.16	26.0 n=38
4. I was encouraged by team members to ask questions regarding patient care	27.40	58.22	85.6 n=125	10.96	3.42	14.4 n=21
Mean value all statements			80.0			20.0

4.4.4.1 Encouraged to ask questions and the practice learning atmosphere pleasant

Students rated highest percentages, that is, 85.6% (n=125) and 82.2% (n=120) on statements stating that they had been encouraged by the team to ask questions related to patient care and that the atmosphere was pleasant for clinical learning respectively. The results showed that the atmosphere in the PHC practice learning was pleasant and had encouraged students to ask questions. These findings are in disagreement with the findings by Lawal *et al.* (2016:36) where students less than 50% of the participants had found the practice learning environment to be pleasant. Encouraging students to ask questions regarding patient care is extremely important because it assists students to develop critical thinking and clinical judgement (Hughes & Quinn, 2013:361). Additionally, a study conducted by D' Souza (2013:28) confirms that a pleasant, friendly atmosphere enhanced the likelihood of the students to participate in nursing activities and consequently increased their way of thinking.

4.4.4.2 Staff members approachable towards students

The majority of the students, 78.1% (n=114) strongly agreed or agreed that the staff had been approachable towards students. The attitude the staff display towards students played a crucial role in their clinical learning. Dale *et al.* (2013:2) asserts

that an open and friendly attitude of clinical supervisors improved students' motivation for learning and as well as their confidence.

4.4.4.3 Received recognition for contributions to patient care

The majority of the students, 74.0% (n=108) reported to have received recognition for their contributions to patient care while 26.0% (n=38) disagreed. A study conducted by Bigdeli, Pakpour, Aalaa, Shekarabi, Sanjari, Haghani and Mehrdad (2015:5) confirms that students consider receiving recognition for their contribution as very important and encouraging to them.

4.4.5 COMMUNICATION N=146

Result on statements regarding communication between students, lectures and professional nurses; lecturers and professional nurses and between the team members are described in this section (Refer to Table 4.10). Strongly agree and agree cumulative ratings ranged from 54.1% to 97.9 %, with a mean of 76.6% while disagree and strongly disagree ratings ranged from 2.1% to 45.9% with a mean of 23.4%.

Table 4 10 Students' responses on communication

Statements on communication	Strongly agree	Agree	Cumulative %/f=	Disagree	Strongly Disagree	Cumulative %/f=
1. I was aware that a file compiled by the lecturer(s), stating the clinical learning outcomes I had to achieve, was available at the different clinics	19.86	35.62	55.5 n=81	30.14	14.38	44.5 n=65
2. Professional nurses were orientated by the lecturer(s) regarding my clinical learning outcomes in order to obtain their support	14.38	39.73	54.1 n=79	36.99	8.90	45.9 n=67
3. Communication between the professional nurses at the clinics and the lecturer(s) regarding my clinical learning was efficient	17.81	41.78	59.6 n=87	31.51	8.90	40.4 n=59
4. Communication between the team members was sufficient to promote patient care	18.49	68.49	87.0 n=127	11.64	1.37	13.0 n=19

Statements on communication	Strongly agree	Agree	Cumulative %f= n=	Disagree	Strongly Disagree	Cumulative %f= n=
5. Communication between me and the lecturer(s) to address any problems that impact on clinical learning was efficient	32.19	51.37	83.6 n=122	13.70	2.74	16.4 n= 24
6. I received prompt feedback from the professional nurse(s) on my clinical performance	19.18	52.05	71.2 n=104	23.97	4.79	28.8 n=42
7. I received prompt feedback from the lecturer(s) on my clinical performance	34.93	54.79	89.7 n=131	7.53	7.53	10.3 n=15
8. The feedback I received helped me to improve my clinical performance	41.10	50.00	91.1 n=133	6.85	2.05	8.9 n=13
9. I asked for assistance to perform procedures that I was not familiar with	44.52	53.42	97.9 n=143	2.05	0	2.1 n=3
Mean value all statements			76.6			23.4

4.4.5.1 Knowledge of a file with clinical learning outcomes compiled by lectures

Only 55.5% (n=81) of the students strongly agreed or agreed that they had been aware that file, that had been compiled by the lecturers stating the clinical learning outcome they had to achieve, had been available at different clinics while 44.5% (n=65) responded negatively. Almost the same number of students, 54.1% (n=79) strongly agreed or agreed that professional nurses had been orientated by lecturers regarding their clinical learning outcomes and 45.9% (n=67) strongly disagreed or disagreed with the statement. A high number of students who responded negatively raised a concern. A file with students' clinical learning outcomes available at each clinic and orientation of the staff on students' learning outcomes assist the clinical staff to carry out their supervisory role effectively. Professional nurses gain insight into the knowledge and the skills students have acquire during clinical placement. (Odole, *et al.*, 2014:66).

4.4.5.2 Sufficient communication between the professional nurses at the clinic and the lecturers

Only 59.6% (n=87) strongly agreed or agreed that communication between the professional nurses at the clinic and the lecturers was sufficient and 40.4% (n=59) strongly disagreed or agreed with the statement. A large number of students who responded negatively raised a concern. Good communication between the lecturers and professional nurses at the clinic is important to ensure that students are supported and achieve optimal learning (Williamson, Callaghan, Whittlesea, Mutton & Heath, 2011:171).

4.4.5.3 Sufficient communication between team members and students and lecturers

On a positive note, a high number of students, 87.0% (n=127) strongly agreed or agreed, that communication between team members was sufficient. Good communication facilitated co-operation between team members which in turn provided an ideal environment for students to learn (Kapucu & Bulut 2011:1150). On the contrary, Bos (2015:2) confirms that in the PHC environment, supervisors felt that they were not supported by other professionals in their supervisory function, which consequently impacted negatively on the learning environment and students' learning.

A high percentage 83.6% (n=122) of the students strongly agreed or agreed that communication between students and lecturers was sufficient to address any problems that impacted on their clinical learning, whereas 16.4% (n=24) disagreed or strongly disagreed. A small percentage of students who responded negatively raised a concern as communication between the lecturers and the students played a central role in facilitating students' learning (Salam *et al.*, 2016:42)

4.4.5.4 Received prompt feedback from the lecturers and professional nurses.

A very high number of the students, 89.7% (n=131) reported to have received prompt feedback from the lecturer(s) on their clinical performance. A much lower percentage 71.2% (n=104) of the students strongly agreed or agreed that they had received prompt feedback from the professional nurse(s) on their clinical

performance. A similar percentage, 71% of the first and second year basic nursing programme students reported to have received feedback continuously from their supervisors in a study conducted by Borrageiro,(2014:17) in the Western Cape private healthcare setting. Feedback plays a crucial role in enhancing students' clinical learning. Therefore, a percentage of students who responded negatively, 28.8% (n=42) raised a concern. Prompt feedback on students' clinical performance helped to identify performance problems early and to develop improvement plans (Gaberson, 2015:357) On the negative side, a qualitative study on perceptions of students on clinical supervision, conducted by (Donough, 2014:56), confirms that some students received minimal feedback on their clinical performance and others no feedback at all.

4.4.5.5 Feedback received from assisted to improve clinical performance.

Regarding the type of feedback received, an extremely high number of students, 91.1% (n=133) strongly agreed or agreed that the feedback they had received helped them to improve their clinical performance. Proper feedback provides insight into students' clinical learning, thus improving their learning and performance and also helping them to fit into the practice setting (Tiwaken, *et al.*, 2015:70). In addition, high quality feedback assisted students to identify their learning needs and also to evaluate their own learning (Embo *et al.*, 2015:343). Once more, a very high number, 97.9% (n=143) of the respondents strongly agreed or agreed that they had asked for assistance to perform procedures that they were not familiar with. These percentages indicate that students had received positive feedback and participated actively in their learning.

4.4.6 HUMAN RESOURCES N=146

This section describes students' ratings on statements addressing human resource student ratios, developmental opportunities, skills and staff qualifications in the primary healthcare practice environment (Refer to table 4.11). The students' cumulative percentages for 'strongly agree' and 'agree' varied between 28.8% (n=42) and 92.5% (n=135), and a mean rating of 75.5%. Percentages in the category of 'disagree' and 'strongly disagree' ranged from 7.5% (n=11) to 71.2% (n=104), with a mean of 24.5%

Table 4 11 Students' responses on human resources

Statements on human resources in the PHC environment	Strongly agree	Agree	Cumulative %/f=	Disagree	Strongly Disagree	Cumulative %/f=
1. The number of professional nurses allocated at the clinic is sufficient to facilitate clinical supervision (i.e. a professional nurse for each student)	9.59	19.18	28.8 n=42	29.45	41.78	71.2 n=104
2. The number of students allocated per clinic was according to the agreement made between the nursing school and the practice setting	24.66	59.58	84.2 n=123	11.64	4.11	15.8 n=23
3. Professional nurses are given opportunities for personal, professional growth and development to increase their clinical knowledge	20.55	67.12	87.7 n=128	9.59	2.74	12.3 n=18
4. Professional nurses have sufficient skills to act as role models	28.08	56.16	84.2 n=123	14.38	1.37	15.8 n= 23
5. Professional nurses were qualified in PHC	34.93	57.53	92.5 n=135	6.85	0.68	7.5 n=11
Mean value all statements			75.5			24.5

4.4.6.1 Sufficient numbers of professional nurses were allocated to the clinic

Numerous students, 71.2% (n=104) responded negatively to the statement that sufficient numbers of professional nurses to facilitate their learning were allocated to the clinic. This was possibly due to the high vacancy rate in PHC caused by nurses who have left the profession for other positions, and nurses who have taken voluntary severance packages (Department of Health (DoH), 2012:55). This issue greatly affects students' learning.

4.4.6.2 Number of students allocated to the clinic was according to the agreement between the school and the practice setting

The majority of students, 84.2% (n=123) strongly agreed or agreed that the number of the students allocated per clinic was according to the agreement made between the nursing school and the practice setting. The results are in disagreement with the finding of a study conducted by Mampunge (2013:45) at Eastern Cape, where final

year nursing students argued that their large number in the practice learning environment negatively affected their clinical learning.

4.4.6.3 Professional nurses received opportunities for personal, professional growth and development

A high number 87.7% (n=128) of students also strongly agreed or agreed that professional nurses were given opportunities for personal, professional growth and development to increase their clinical knowledge. In order to carry out their supervisory role effectively, clinical supervisors need training and support in the clinical placement, to meet students' learning and educational needs (Bos, 2014:15).

4.4.6.4 Professional nurses were qualified in Primary health care (PHC)

The highest percentage of the students 92.5% (n=135) strongly agreed or agreed that professional nurses were qualified in PHC. The results are in agreement with the findings of the study conducted by Peters *et al.* (2015:179) where the student nurses found professional nurses at PHC practice learning environment to be highly skilled in their performance and they were able share their expertise with them.

4.4.7 MATERIAL RESOURCES N=146

Table 4.12 shows students' scores on the availability of material resources in the primary healthcare practice environment. These cumulative scores ranged from 35.6% (n=52) and 52.1% (n= 76) in the category of 'strongly agree' and 'agree' and 47.9% (n=70) and 64.4% (n=94) in the category of 'disagree' and 'strongly disagree'. The mean was 42.7% and 57.3% respectively.

Table 4 12 *Students' ratings on material resources*

Statements on material resources	Strongly agree	Agree	Cumulative %f=	Disagree	Strongly Disagree	Cumulative %f=
1. Adequate equipment were available to provide safe nursing care	7.53	28.08	35.6 n=52	43.15	21.23	64.4 n=94
2. Adequate consumables were available to provide safe nursing care	5.48	34.93	40.4 n=59	41.10	18.49	59.6 n=87
3. I had access to all facilities and materials necessary to facilitate my learning	11.64	40.41	52.1 n=76	32.88	15.07	47.9 n=70
Mean value all statements			42.7			57.3

4.4.7.1 Adequate equipment and consumables were available to provide safe nursing care

A very low percentage 35.6% (n=52) of respondents strongly agreed or agreed that material resources were available to provide safe care, as compared to a high percentage of 64.4% (n= 94) who responded negatively. Furthermore, less than half of the students, 40.4% (n=59) strongly agreed or agreed that adequate consumables were available to provide safe nursing care and 59.6% (n=87) disagreed. Inadequate material resources at PHC clinics raised a concern regarding the quality of care received by patients in these settings, which impacted negatively on students' learning. In a study conducted by Setati and Nkosi (2017:135) on the perceptions of professional nurses on student mentorship in Polokwane clinical areas, professional nurses confirmed that lack of equipment in the clinical environment impacted negatively on service delivery and mentoring of the students.

4.4.7.2 Access to all facilities and materials necessary to facilitate their learning

More than half of the students, 52.1% (n=76) strongly agree or agree that they had access to all facilities and materials necessary to facilitate their learning. In a study conducted by Padayachee (2014:47) in Kwazulu Natal hospital setting, a much higher percentage, that is, 90% of the 1st, 2nd and 3rd year students disagreed that equipment and resources had been available to carry out clinical procedures effectively. The fact that almost half, that is, 47.9% (n=70) of the students in this

study responded negatively raised a concern, considering effect material resources have on students' learning. The fourth year nursing students reported that inadequate material resources inhibited the integration of theory and practice in the practice learning environment, that is, hospitals, clinics and community settings, in a study conducted by Tiwaken *et al.* (2015:71). In addition to material resources, the availability a space where students can meet with supervisors is valued by students as it enhanced their learning (Williams, Ernstzen, Statham & Hanekom, 2014:209; Zakaria & Duad, (2009:6).

4.4.8 SERVICES N=146

Students' ratings on services in the primary healthcare practice environment are reflected in table 4.13. The results showed that the strongly agree and agree, cumulative percentages, varied between 89.7% (n=131) and 80.1% (n=117) with a mean of 84.9%. Strongly disagree and disagree cumulative percentages varied between 19.9% (n=29) and 10.3% (n=15), with a mean of 15.1%. The results show that services in the primary healthcare practice environment promoted opportunities for students to learn.

Table 4 13 Ratings on PHC services

Statements on services	Strongly agree	Agree	Cumulative %/f=	Disagree	Strongly Disagree	Cumulative %/f=
1. Appropriate learning opportunities were available to allow students' learning outcomes to be achieved	19.86	62.33	82.2 n=120	14.38	3.42	17.8 n=26
2. I rotated through all the available healthcare services at the clinic	28.08	52.05	80.1 n=117	18.49	1.37	19.9 n=29
3. I was exposed to a variety of clinical cases with positive clinical signs	29.45	58.22	87.7 n=128	12.33	0	12.3 n=18
4. I received supervised independence in the provision of nursing care	22.60	67.12	89.7 n=131	8.90	1.37	10.3 n=15
Mean value all statements			84.9			15.1

4.4.8.1 Availability of learning opportunities

A high percentage of students, 82.2% (n=120) strongly agreed or agreed that appropriate learning opportunities were available to assist them achieve learning outcomes. According to standards and principles of practice learning laid down by the NMC (2011) cited in Hughes and Quinn (2013:366) students must have access to a range of practice learning opportunities sufficient to meet their programme outcomes. In addition, Jacobs *et al.* (2013:4) highlighted the need to expose students to suitable learning opportunities to acquire psychomotor, cognitive and affective skills.

4.4.8.2 Rotated through all the available healthcare services at the clinic

A high percentage of the students, 80.1% (n=117) strongly agreed or agreed that they had rotated through all the available healthcare services at the clinic and 19.9% (n= 29) disagreed. The fact that almost 20% of respondents responded negatively, raised a concern, as clinical practice gave the students the opportunity to experience and gain competence in managing different diseases and patients' situations as they worked with experienced professionals (Tiwaken *et al.*, 2015:69).

4.4.8.3 Exposed to a variety of clinical cases with positive clinical signs

A high number of respondents, 87.7% (n=128) strongly agreed or agreed that they had been exposed to a variety of clinical cases with positive clinical signs. The results showed that students had sufficient exposure to a variety of clinical cases in the primary healthcare learning environment. Professional nurses provided care to patients with a variety of health conditions and diseases these setting (Bos, 2014:5). However, it is imperative that students' rotations are carefully monitored by clinical supervisors, to award all the students the opportunity to be exposed to a variety of clinical cases (Bos *et al.*, 2015:6)

4.4.8.4 Received supervised independence in the provision of care

Almost 90%, 89.7% (n=131) of the students strongly agreed or agreed that they had received supervised independence in the provision of care. The provision of a supervised independence was reported by very high percentage of students, which motivated and encouraged students to apply and improve their communication and

diagnostic skills (AlHaqwi & Taha, 2015:99). In addition, the results showed that the supervisors had demonstrated trust in students' abilities and believed it was valuable for student's learning to spend time alone with patients (Bos, Silén, & Kaila, 2015:5).

4.4.9 GENERAL

Table 4.14 shows students' responses on a general, and an open-ended question. Students had to indicate whether primary healthcare practice environments in the Free State province promote effective clinical learning for students, and what should be improved to optimize clinical learning. Most students 67.8% (n=99) agreed that PHC learning environments in the Free State province promote effective clinical learning for students opposed to 32.2% (n=47) who responded negatively on this issue. Positive responses made by the students included the availability of learning opportunities, 54.6% (n= 54), followed by the positive attitude of the staff at 23.2% (n=23). Negative responses included the shortage of human and material resources indicated by 15.2% (n=15) students, followed by the professional nurses negative attitude at 7.1% (n=7)

Table 4 14 Categories related to open-ended questions

CATEGORIES	n=value	Percentage %	Response
Professional nurses have negative attitudes	7	7.1	Negative
Shortage of human and material resources	15	15.2	Negative
Availability of learning opportunities	54	54.6	Positive
Unavailability or learning opportunities	3	3.0	Negative
Staffs attitudes	23	23.2	Positive
Staff level of competence	3	3.0	Negative
Limited infrastructure	1	1.0	Negative

Table 4.15 shows the areas to be addressed in order to optimize clinical learning. Most students, 56.6% (n=83) reported that the staff and material resources should be increased, followed by the positive staff attitude, 19.9% (n=29), increased learning time 15.8% (n=23), and effective communication between campuses and clinical areas 11.6% (n=17).

Table 4 15 Areas where clinical learning could be optimised

STATEMENTS: IMPROVEMENT NEEDED TO OPTIMISE CLINICAL LEARNING	n=value	Percentage %
Effective communication between NEI and clinical areas, with clear objectives for clinical learning	17	11.6
Increased staff and resources	83	56.6
Increased supervision from lecturers	18	12.3
Positive attitude to be displayed by staff	29	19.9
Increase learning time	23	15.8
Improved working conditions	11	7.53
Improved infrastructure	9	6.16
Learning opportunities based on availability of services	12	8.22
In-service training of professional nurses	7	4.79

4.5. COMPARISON OF THE RESULTS BETWEEN CAMPUSES

N=146

This section compares ratings at three campuses regarding the primary healthcare practice learning environment. Chi Square and the Fisher Exact tests were used to compare the scores and determine if distributions of categorical data, differ between the three campuses. A limitation to the use of these tests is that there are three campuses, and four options for each question, as compared to a comparison between two sets of data. The results show a statistically significant difference

between the three campuses on certain statements. **NOTE:** Only statements that indicate a statistical difference, with a P-value of less than 0.05 are described.

4.5.1 LECTURER INFORMED THE NURSE-IN-CHARGE ABOUT LEARNING OUTCOMES

Results in table 4.16 showed that a higher percentage of the students 35.14 (n=13) at Campus A strongly agreed and 54.05 (n=20) agreed, that lecturer informed the nurse-in-charge about learning outcomes, followed by Campus C with a percentage of 29.03% (n=18) and 43.55% (n=27) which respectively agreed with the statement. Compared to the two campuses, a low percentage of the students at Campus B responded positively in the category of ‘strongly agree’ and ‘agree’. A high percentage of the students in the category of ‘disagree’ and ‘strongly disagree’ (44.68%, n=21) at Campus B raised a concern, as the orientation assists professional nurses to support students in meeting their learning outcomes.

Table 4 16 Statistics per campus on statement 2.1.4: The lecturer informed the nurse-in-charge about learning outcomes I have to achieve before placement

Campus	The lecturer informed the nurse-in-charge about learning outcomes I have to achieve before placement				
	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
A	n=13 35.14%	n=20 54.05%	n= 3 8.11%	1 2.70	37
B	12 25.53	14 29.79	17 36.17	4 8.51	47
C	18 29.03	27 43.55	15 24.19	2 3.23	62
Total	43	61	35	7	146
P- value 0.0392					

4.5.2 RECEIVED SUPERVISION WHILE CONSULTING CLIENTS DURING CLINICAL PLACEMENT

In table 4.17 scores regarding the availability of supervision while consulting clients during clinical placement are given. At Campus C, a higher percentage of students 29.03 (n=18) strongly agreed that a professional nurse always supervised them, while they consulted patients during placement. Furthermore, in the category “agree” Campus C scored the highest percentage of 40.32% (n=25) followed by Campus B with a percentage of 36.17% (n=17), and Campus A with 24.32% (n=9) in the category of ‘agree’. The high percentage of the students at Campus A, 59.5% (n=22) and Campus B 46.8% (n=22) that responded negatively was of concern, considering the fact that as nurses on training, students should always have worked under the supervision of a professional nurse. A high percentage of students at Campus C responded positively.

Table 4 17 Statistics per campus on statement 2.1.13: A professional nurse always supervised me while I was consulting a patient during placement

Campus	A professional nurse always supervised me while I was consulting a patient during placement				
	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
A	6 16.22	9 24.32	15 40.54	7 18.92	37
B	8 17.02	17 36.17	17 36.17	5 10.64	47
C	18 29.03	25 40.32	18 29.03	1 1.61	62
Total	32	51	50	13	146
P- value 0.0341					

4.5.3 PROFESSIONAL NURSES SHARED INFORMATION RELATED TO THE PATIENT’S HEALTH STATUS WITH HIM/HER

Regarding the professional nurses sharing of information related to the patient’s health status with him / her, Campus C received the highest percentage of 32.26 % (n=20) in the category of ‘strongly agree’. Students at Campus A and B rated the statement as low as 10.64% (n= 5) and 16.22% (n=6) respectively. However, more students 63.83% (n=30) agreed that professional nurses had shared the information

related to the patient's health status in Campus B, followed by Campus C with a percentage of 51.60% (n=32), and Campus A 43.24% (n=16). Overall, Campus C scored a higher percentage on positive responses, followed by Campus B. A high number of the students who responded negatively at Campus A 40.54% (n=15) was of concern (Refer to Table 4.18).

Table 4 18 *Statistics per campus on statement 2.2.1.2: Professional nurses explained to patients what their current health condition entails*

Campus	Professional nurses explained to patients what their current health condition entails				
	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
A	6 16.22	16 43.24	12 32.43	3 8.11	37
B	5 10.64	30 63.83	10 21.28	2 4.26	47
C	20 32.26	32 51.61	10 16.13	0 0.00	62
Total	31	78	32	5	146
P- value = 0.0341					

4.5.4 PROFESSIONAL NURSES DISCUSSED THE PATIENTS' TREATMENT WITH HIM/HER

A high percentage of Campus C's students, 27.42% (n=17) strongly agreed and agreed 54.84% (n=34) that the professional nurses had discussed the patients' treatment with him / her as compared to a low percentage of the students 8.11% (n=3) in Campus A and 12.77% (n=6) in Campus B in the same category. Almost 46%, that is, 45.95% (n=17) of Campus A students and 38.30% (n=18) of students in Campus B agreed that professional nurses had discussed the patients' treatment with him / her. However, a high number of the students who disagreed in Campuses A 35.14% (n=13) and B 36.17% (n=17) raised a concern. A high number of Campus C students responded positively on this statement (82.26%, n=51). Refer to Table 4.19.

Table 4 19 Statistics per campus on statement 2.2.1.3: Professional nurses discussed the patient’s treatment plan with him/her

Campus	Professional nurses discussed the patient’s treatment plan with him/her				
	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
A	3 8.11	17 45.95	13 35.14	4 10.81	37
B	6 12.77	18 38.30	17 36.17	6 12.77	47
C	17 27.42	34 54.84	11 17.74	0 0.00	62
Total	26	69	41	10	146
P-value = 0.0017					

4.5.5 PROFESSIONAL NURSES EXPLAINED TO PATIENTS HOW THEIR PRESCRIBED TREATMENT OR MEDICATION WORKS.

Results in table 4.20 compares students’ ratings on the statement whether the professional nurses had explained to patients how their prescribed treatment or medication worked. A low percentage of the students responded positively in Campus A, with 18.92% (n=7) and 35.14% (n=13) percentages under ‘strongly agree’ and ‘agree’ respectively. More than half 51.06 (n=24) of the students in Campus B agreed. A higher percentage of Campus C students responded positively, with a percentage of 33.87% (n=21) under ‘strongly agree’ and 53.23% (n=33) under ‘agree’. A high percentage of 40.54% (n=15) students who disagreed at Campus A raises a concern. Similarly, the fact that 25.53% (n=12) of the students at Campus B disagreed on this statement, should be addressed, as this reflects negatively on the quality of clinical learning students had received.

Table 4 20 Statistics per campus on statement 2.2.1.4: Explained to patients how their prescribed treatment/medication works

Campus	Explained to patients how their prescribed treatment/medication works				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	7 18.92	13 35.14	15 40.54	2 5.41	37
B	7 14.89	24 51.06	12 25.53	4 8.51	47
C	21 33.87	33 53.23	7 11.29	1. 1.61	62
Total	35	70	34	7	146
P- value 0.0052					

4.5.6 PROFESSIONAL NURSES EXPLAINED TO FAMILY MEMBER(S) THE PATIENT'S CURRENT HEALTH CONDITION

Results in table 4.21 showed that a high percentage of students at Campus C responded positively that professional nurses had explained to family member(s) the patient's current health condition. Campus C students rated 20.97% (n =13) in the category 'strongly agree' and 62.90% (n=39) 'agreed'. At Campus B, 36.17% (n=17) of the students disagreed, and 17.02% (n=8) strongly disagreed with the statement. A much higher percentage 43.24% (n=16) disagreed and strongly disagreed (10.81%, n=4) at Campus A. Once more, the percentages of the students who responded negatively at Campus A and B raised a concern.

Table 4 21 Statistics per campus on statement 2.2.2.2: Professional nurses explained to family member(s) what the patient's current health conditions

Campus	Professional nurses explained to family member(s) what the patient's current health conditions				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	4 10.81	13 35.14	16 43.24	4 10.81	37
B	4 8.51	18 38.30	17 36.17	8 17.02	47
C	13 20.97	39 62.90	8 12.90	2 3.23	62
Total	21	70	41	14	146
P- value 0.0005					

4.5.7 PROFESSIONAL NURSES DISCUSSED PATIENTS' TREATMENT PLANS WITH FAMILY MEMBER(S).

Results on how students rated the statement on whether professional nurses discussed patients' treatment plans with family member(s) varied between the three campuses. Only 5.41% (n= 2) of campus A's students responded positively, that is, strongly agreed, on the mentioned statement. Fifteen (40.54%) did agree that patient's treatment plans had been discussed with family member(s). The responses of students at Campus B varied between 6.38% (n=3) who strongly agreed, to 34.04% (n=16) who agreed with the statement. Campus C's students 59.68% (n=37) agreed with the statement. Students who disagreed were 46.81% (n=22) Campus B, and 45.95% (n=17) Campus B (Refer to table 4.22).

Table 4 22 Statistics per campus on statement 2.2.2.3: Professional nurses discussed the patient’s treatment plan with family member(s)

Campus	Professional nurses discussed the patient’s treatment plan with family member(s)				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	2 5.41	15 40.54	17 45.95	3 8.11	37
B	3 6.38	16 34.04	22 46.81	6 12.77	47
C	11 17.74	37 59.68	13 20.97	1 1.61	62
Total	16	68	52	10	146
P- value = 0.0071					

4.5.8 PROFESSIONAL NURSES’ EXPLAINED HOW PATIENTS’ PRESCRIBED TREATMENT OR MEDICATION WORK

The students’ responses whether professional nurses’ explained how patients’ prescribed treatment or medication work, are compared in this section. Campus A’s students strongly agreed (8.11%, n=3) and agreed (43.24%, n=16) that the professional nurses had explained treatment or medication. Campus B’s students also rated a lower percentage, twenty-four (51.06%) agreed and only three (6.38%) strongly agreed on the statement. Considering Campus C, a higher percentage students 58.06% (n=36) agreed that professional nurses explained how patients’ prescribed treatment or medication works. Compared to Campus A and B, Campus C’s students therefore rated this statement more positive. However, the students also disagreed on the above statement, for example, at Campus A, 40.54% (n=15) had disagreed (Refer to Table 4.23).

Table 4 23 Statistics per campus on statement 2.2.2.4: Professional nurses explained how the patient’s prescribed treatment/medication works

Campus	PROFESSIONAL NURSES EXPLAINED HOW THE PATIENT’S PRESCRIBED TREATMENT/MEDICATION WORKS				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	3 8.11	16 43.24	15 40.54	3 8.11	37
B	3 6.38	24 51.06	13 27.66	7 14.89	47
C	14 22.58	36 58.06	10 16.13	2 3.23	62
Total	20	76	38	12	146
P- value = 0.0101					

4.5.9 PROFESSIONAL NURSES WERE PASSIONATE AND/OR ENTHUSIASTIC IN THEIR SERVICE DELIVERY

A comparison of scores on the statement that professional nurses were passionate and/or enthusiastic in their service delivery can be viewed in table 4.24. None of the students at Campus A had strongly agreed that professional nurses were passionate in their service. However, just above half, 51% (n=19) of the students at the same campus had responded positively on this statement. Almost 50% of the students (48.65%) at this campus had been negative about this issue.

More students at Campus B had responded positively, that is, 8.51% (n=4) strongly agreed and 53.19% (n=25) agreed with the statement. A high percentage of the students at Campus C had responded positively with a percentage of 24.19 (n=15) strongly agree and 61.29% (n=38) agreed. Campus C results on this statement had been congruent with high percentages scored by this campus on statements related to sharing of information with patients and family members. The professional nurses who had been passionate about their service involved the patients and their families in their care (Refer to Table 4.24).

Table 4 24 Statistics per campus on statement 2.2.3: Professional nurses were passionate and/or enthusiastic in their service delivery

Campus	Professional nurses were passionate and/or enthusiastic in their service delivery				
	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
A	0 0.00	19 51.35	14 37.84	4 10.81	37
B	4 8.51	25 53.19	13 27.66	5 10.64	47
C	15 24.19	38 61.29	8 12.90	1 1.61	62
Total	19	82	35	10	146
P- value = 0.0003					

4.5.10 PROFESSIONAL NURSES DELIVERED A HIGH STANDARD OF CARE

A high percentage of students at Campus C responded positively concerning the standard of care. A percentage of 20.97% (n=13) had strongly agreed on the standard of care delivered by professional nurses. Added to this, 62.90 (n=39) had agreed on the statement. Campus B's positive response percentages were low, with 8.51% (n=4) of the students who had strongly agreed, and 46.81% (n=22) of the students who had agreed. Campus A also scored low positive responses, with 45.95% (n=17) of the students who had responded negatively. Once more, results of Campus C on this statement about the standard of care had been congruent with the high percentages obtained under statements addressing sharing of information with patients and their families, and that professional nurses had been passionate about their service (Refer to Table 4.25).

Table 4 25 Statistics per campus on statement 2.2.5: Professional nurses delivered a high standard of care

Campus	Professional nurses delivered a high standard of care				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	1 2.70	19 51.35	15 40.54	2 5.41	37
B	4 8.51	22 46.81	19 40.43	2 4.26	47
C	13 20.97	39 62.90	9 14.52	1 1.61	62
Total	18	80	43	5	146
P- value = 0.0028					

4.5.11 PROFESSIONAL NURSES ACTED AS ROLE MODELS.

If combined, a high percentage of students at Campus C had responded positively, that is 24.19% (n=15) had strongly agreed, and 58.06% (n=36) had agreed on a statement about professional nurses acting as role models. Campus A and B percentages on this issue were lower. Campus B scored 8.51% (n=4) and 44.43% (n=21) on ‘strongly agree’ and ‘agree’ respectively, followed by Campus A with 8.11% (n=3) in the category of ‘strongly agree’ and 43.24% (n=16) in the category of ‘agree’. The results showed that the professional nurses in the PHC clinical learning environments utilized by Campus C’s students had received higher ratings as role models. Campus A and B should be concerned with the fact that 18 (48.65%) and 22 (46.81%) students respectively, had not rated the professional nurses as their role models (Refer to Table 4.26).

Table 4 26 Statistics per campus on statement 2.2.7: Professional nurses acted as role models

Campus	Professional nurses acted as role models				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	3 8.11	16 43.24	16 43.24	2 5.41	37
B	4 8.51	21 44.68	19 40.43	3 6.38	47
C	15 24.19	36 58.06	10 16.13	1 1.61	62
Total	22	73	45	6	146
P- value = 0.0064					

4.5.12 WORK RELATIONSHIP WITH MEDICAL PRACTITIONERS

Regarding the work relationship students had with medical practitioners, Campus A's students (40.54%, n=15) were somewhat positive and had strongly agreed on the statement, while seventeen students (45.95%) had agreed. Compared to Campus A's ratings, Campus C's students had a different opinion and had rated this statement lower, that is, 29.03% (n=18) had strongly agreed and 41.94% (n=26) students had agreed on this matter. At Campus B 38.30% (n=18) of the students had disagreed on the statement, and 12.77% (n=6) had strongly disagreed. Campus A students reported to have had more opportunities to work with medical doctors, followed by Campus C, while Campus B students had had fewer opportunities (Refer to Table 4.27).

Table 4 27 Statistics per campus on statement 2.3.2.1: I was given the opportunity to work with medical practitioners

Campus	I was given the opportunity to work with medical practitioners				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	15 40.54	17 45.95	3 8.11	2 5.41	37
B	6 12.77	17 36.17	18 38.30	6 12.77	47
C	18 29.03	26 41.94	15 24.19	3 4.84	62
Total	39	60	36	11	146
P = 0.0066					

4.5.13 WORK RELATIONSHIP WITH OCCUPATIONAL THERAPISTS.

At the three campuses, a high percentage of the students had responded negatively to the statement addressing the relationship the students had reported to have had with occupational therapist (Refer to table 4.28). At Campus B, a high percentage of the students 72.34% (n=34) had disagreed, while 12.77% (n=6) had strongly disagreed, that they had had such an opportunity. A relative high percentage of students 40.54% (n=15) at Campus A had disagreed, and 27.03% (n=10) had strongly disagreed on this issue. Similarly, at Campus C, 41.94% (n=26) of the students had disagreed, and 11.29% (n=7) had strongly disagreed and indicated that

they had not work with occupational therapists. The number of trained occupational therapists and their distribution to different healthcare facilities could have contributed to these ratings.

Table 4 28 Statistics per campus on statement 2.3.2.5: I was given the opportunity to work with occupational therapists

Campus	I was given the opportunity to work with occupational therapists				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	2 5.41	10 27.03	15 40.54	10 27.03	37
B	2 4.26	5 10.64	34 72.34	6 12.77	47
C	6 9.68	23 37.10	26 41.94	7 11.29	62
Total	10	38	75	23	146
P- value = 0.0045					

4.5.14 WORK RELATIONSHIP WITH PHYSIOTHERAPISTS

Results in table 4.29 showed that the majority of students in Campus A, had responded positively, that is, 27.03% (n=10) had strongly agreed and 40.54% (n=15) agreed that they had been given an opportunity to work with physiotherapists. A relatively high percentage of students at Campus B had responded negatively, that is, 44.68% (n=21) had disagreed while 12.77% (n=6) had strongly disagreed on the statement, followed by Campus C also with a relatively low percentage (40.32%, n=25) students who had had limited opportunities to work with physiotherapists. Also, the number of trained physiotherapists and their distribution to different healthcare facilities could have contributed to these ratings.

Table 4 29 Statistics per campus on statement 2.3.2.6: I was given the opportunity to work with physiotherapists

Campus	I was given the opportunity to work with physiotherapists				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	10 27.03	15 40.54	4 10.81	8 21.62	37
B	5 10.64	15 31.91	21 44.68	6 12.77	47
C	9 14.52	24 38.71	25 40.32	4 6.45	62
Total	24	54	50	18	146
P-value = 0.0110					

4.5.15 WORK RELATIONSHIP WITH OPTOMETRISTS

At all the campuses, a high percentage of the students had disagreed and had strongly disagreed that they had had the opportunity to work with optometrists. A high number of the students at Campus B, 76.60% (n=36) had disagreed. Similarly, a high number of students in Campus A, 48.65 (n=18) had disagreed and 24.32% (n=9) had strongly disagreed. A high number of Campus C's students had also responded negatively, that is, 51.61% (n=32) had disagreed that they had worked with optometrists. All three campuses reported to have had fewer opportunities to work with optometrists than they had with occupational and physiotherapists (Refer to table 4.30).

Table 4 30 Statistics per campus on statement .3.2.7: I was given the opportunity to work with Optometrists

Campus	I was given the opportunity to work with Optometrists				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	3 8.11	7 18.92	18 48.65	9 24.32	37
B	2 4.26	2 4.26	36 76.60	7 14.89	47
C	2 3.23	21 33.87	32 51.61	7 11.29	62
Total	7	30	86	23	146
P- value = 0.0017					

4.5.16 ORIENTATION OF PROFESSIONAL NURSES BY LECTURERS ON STUDENTS' CLINICAL LEARNING OUTCOMES.

Regarding orientation of professional nurses by lecturers on the students' clinical learning outcomes, a very high percentage of the students had responded negatively in all three campuses. Almost half of the students, 46.81% (n=22) in Campus B had disagreed and 10.64% (n=5) had strongly disagreed, followed by Campus A with a percentage of 40.54% (n=15) of students who disagreed. The majority of the students in Campus C had responded positively, although percentages of 19.35% (n=12) and a 41.94% (n=26) under 'strongly agree' and 'agree' respectively, were low (Refer to Table 4.31).

Table 4 31 Statistics per campus on statement 2.5.2: Professional nurses were orientated by the lecturer(s) regarding my clinical learning outcomes in order to obtain their support

Campus	Professional nurses were orientated by the lecturer(s) regarding my clinical learning outcomes in order to obtain their support				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	8 21.62	13 35.14	15 40.54	1 2.70	37
B	1 2.13	19 40.43	22 46.81	5 10.64	47
C	12 19.35	26 41.94	17 27.42	7 11.29	62
Total	21	58	54	13	146
P-value = 0.0491					

4.5.17 NUMBER OF PROFESSIONAL NURSES ALLOCATED AT THE CLINIC IS SUFFICIENT TO FACILITATE CLINICAL SUPERVISION

The students representing the three campuses had responded negatively on the number of professional nurses allocated at the clinic versus facilitation of clinical supervision. Compared to Campus A's rating, 13.51% (n=5) and B, 6.38% (n=3), a higher percentage of the students 32.26% (n=20) in Campus C had agreed that the number of professional nurses allocated at the clinic was sufficient to have facilitate clinical learning. Ratings in the category "disagree" ranged from 27.03% (n=10) in Campus A, to 31.91 % (n=15) in Campus B. Ratings related to the category "strongly disagree" were 43.65% (n=18) in Campus A, and 59.57% (n= 28) in Campus B (Refer to Table 4.32).

Table 4 32 Statistics per campus on statement 2.6.1: The number of professional nurses allocated at the clinic. Is sufficient to facilitate clinical supervision

Campus	The number of professional nurses allocated at the clinic is sufficient to facilitate clinical supervision				
	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
A	4 10.81	5 13.51	10 27.03	18 43.65	37
B	1 2.13	3 6.38	15 31.91	28 59.57	47
C	9 14.52	20 32.26	18 29.03	15 24.19	62
Total	14	28	43	61	146
P- value = 0.0007					

4.5.18 ADEQUATE EQUIPMENT WAS AVAILABLE TO PROVIDE SAFE NURSING CARE

The results in Table 4.33 showed that most of the students had responded negatively at the three campuses. A very high percentage of the students, ranging from 33.87% (21) in Campus C, 45.95% (n=17) in Campus A and 53.19% (n=25) in Campus B had disagreed that adequate equipment had been available to provide safe nursing care. This posed a challenge not just to students' clinical learning, but also to the patient care.

Table 4 33 Statistics per campus on statement 2.7.1: Adequate equipment was available to provide safe nursing care

Campus	Adequate equipment was available to provide safe nursing care				
	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
A	2 5.41	7 18.92	17 45.95	11 29.73	37
B	1 2.13	10 21.28	25 53.19	11 23.40	47
C	8 12.90	24 38.71	21 33.87	9 14.52	62
Total	11	41	63	31	146
P- value = 0.0343					

4.5.19 ACCESS TO FACILITIES AND MATERIAL

Statistics showing how the students had rated the access to facilities and material at the three campuses are indicated in Table 4.34. A high percentage of the students had responded negatively at all three campuses, with percentages varying between 25.24% (16) and 42.22% (n=20) in the category of 'disagree'. Nearly 30%, that is 29.73% (n=11) of the students in Campus A had strongly disagreed that they had access to facilities and material resources necessary to facilitate learning, followed by Campus B with a percentage of 12.77% (n =6) in the same category.

Table 4 34 Statistics per campus on statement 2.7.3: I had access to all facilities and materials necessary to facilitate my learning

Campus	2.7.3 I had access to all facilities and materials necessary to facilitate my learning				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	5 13.51	9 24.32	12 32.43	11 29.73	37
B	1 2.13	20 42.55	20 42.55	6 12.77	47
C	11 17.74	30 48.39	16 25.81	5 8.06	62
Total	17	59	48	22	146
P- value= 0.0044					

4.5.20 ROTATION THROUGH ALL THE AVAILABLE HEALTHCARE SERVICES AT THE CLINIC

The results in Table 4.35 showed that the highest percentage of the students who had strongly agreed that they had been rotated through all the available healthcare services at the clinic, were from Campus C, 40.32 (n=25). The students at Campus A and B had rated the statement on rotation 18.92% (n= 7) and 19.15% (n=9) respectively in the category of 'strongly agree'. However, in all three campuses students had allocated high percentages in the category of 'agree', varying between 48.94% (n=23) and 59.46% (n=22). A percentage of 27.66 (n=13) students who had disagreed and 4.26%, (n=2) who had strongly disagreed from Campus B makes the number of students who had responded negatively high, that is 15 students out of 47. Campus C's students had rated this statement the highest, 92.32% (n=56), followed by Campus A and lastly Campus B.

Table 4 35 *Statistics per campus on statement 2.8.2 I rotated through all the available healthcare services at the clinic*

Campus	2.8.2 I rotated through all the available healthcare services at the clinic				
	Strongly .Agree	Agree	Disagree	Strongly Disagree	Total
A	7 18.92	22 59.46	8 21.62	0 0.00	37
B	9 19.15	23 48.94	13 27.66	2 4.26	47
C	25 40.32	31 50.00	6 9.68	0 0.00	62
Total	41	76	27	2	146
P– value = 0.0165					

4.5 CONCLUSION

This chapter presented the results of the nursing students’ perspectives on the support they had received before placement, on commencement and during their clinical placement, leadership, relationships, communication, human and material resources and services in the PHC practice learning environment, to draw conclusions and to answer the research question. The results showed that students were mostly guided and supported before clinical placement, on commencement of clinical placement and during clinical placement. However, the adequately preparation of the professional nurse needs attention as well the supervision of students by professional nurses. The involvement of patients and their families in their care also needs attention, as well as giving students the opportunity to work with other members of the multidisciplinary team. Furthermore, comparison of certain statements between the three campuses showed that Campus C students had responded positively in most statements, except in the relationships the students had had with other members of the multidisciplinary team, availability of equipment and human resources when all three campuses responded negatively. Campus A and B responded negatively in most of the statements. The next chapter presents a detailed discussion, recommendations as well as limitations of this study.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

Chapter 4 discussed the results of data analysed by means of descriptive statistics with regard to the objective of the study, that is, to describe the perspectives of diploma student nurses at a School of Nursing regarding the primary healthcare practice learning. The sub-objective was to compare these students' perspectives on primary healthcare practice learning environments. Chapter 5 presents conclusions, and recommendations based on the results. The limitations related to the study are also included.

5.2 CONCLUSIONS

Practice learning environments formed an integral part of the students' training. To effectively facilitate the students' clinical learning required the support of all relevant stakeholders. From the students' perspective, effective clinical learning environments are those environments where clinical teachers and / or supervisors made an effort to support them (Ali, Banan & Seraty, 2015:3).

A high range (71.3% - 95.9%) was allocated to all categories related to the support rendered to the students. These categories included for example, agreement on the theoretical knowledge of the students, learning opportunities, briefing on rules and responsibilities.

Results showed that a high percentage of the students had reported to have received support before (89.6%), on commencement (85.4%), and during (75.6%) clinical placement. However, the extent of the support received by the students before clinical placement, was higher than that received on commencement, and much lower during clinical placement. As a result, there is the need for the lecturers to improve the extent to which they inform the nurse-in-charge, about the learning outcomes the students have to achieve. Supervisors who are well prepared and

informed about their expectations might be more likely to motivate the students to learn (Dale, Leland & Dale, 2013: 3; Ma, Li, Liang, Bai & Song, 2014: 5).

A high number of the students who gave negative responses on the supervision by the professional nurses when consulting patients (43.1%) and when performing clinical procedures (34.9%), indicated that the supervision they had received from the professional nurses had not been adequate to meet their learning needs and should therefore be improved. Furthermore, the percentage of students (21.2%) who disagreed that they had found the PHC environment as nurturing showed that the atmosphere of the PHC environment could be improved. On the positive side, the results showed that the students had received the necessary theoretical background. Briefing them on learning opportunities, their roles and responsibilities had received positive responses.

Regarding leadership, the need for the professional nurses to show respect towards patients, and the patient's family were highlighted. Allowing the students to attend developmental opportunities was indicated as another area that needed improvement.

According to 25.4% of the students, the professional nurses had not explained the patients' current health status to the patients, and according to 37.6% of the students the professional nurses had not informed the families of the patients' current health status. Positive feedback was also not received on the statement whether the nurses had discussed the patients' treatment plans or medication. The students' feedback accentuated the fact that the professional nurses could share more information, concerning the patients' health, with all involved. The obligation to provide an environment that reflected mutual respect and support, to enable the students to understand the integrated nature of the practice was crucial (Nursing and Midwifery Board of Ireland, 2015:5).

Furthermore, the need for the professional nurses to improve their professional behaviour, was indicated by the number of the students who had responded negatively regarding the nurses' quality of care (32.9%), sharing their expertise (21.9%), acting as role models (34.9%), and the passion they had shown towards

service delivery (30.8%). Opposed to the negative feedback, (87.7%) of the students had responded positively on the statement, of whether the professional nurses had sufficient skills to act as role models. These students indicated that the nurses had been professionally competent to render quality care and to share their expertise with them. Professional nurses who were positive role models had instilled learning about caring to the students (Henderson, *et al.*, 2011:196; Ma, *et al.*, 2014:3).

The results showed that communication between the campuses and the clinical practice areas was not adequate. A very high number of negative responses (40.4%) regarding the effectiveness of communication between the professional nurses at the clinics regarding the students' clinical learning, including the knowledge about a file compiled by the lecturers, stating the clinical learning outcomes the students had to achieve at the different clinics (44.5%), all reflected the need for improvement in the communication between the two partners. These findings were in agreement with the results of the study conducted by Lawal, Weaver, Bryan & Lindo (2016:37) where over 50% of the students indicated the need for improvement in the communication between the educational and the clinical areas. Feedback the students received from the professional nurses also needed improvement, although the majority of the students (76.6%) had responded positively. All the students deserved to receive feedback on their performance in order to improve their knowledge and skills. On a positive note, the results showed that the communication between the students and the lecturers had been effective.

The relationships the students had with all the members of the PHC multidisciplinary team had not been sufficient. Compared to other members of the multidisciplinary team, the majority of the students (67.8%) had had an opportunity to work with medical practitioners. Overall, the statements related to relationships received a very high percentage of negative responses (mean: 44.5%). On the contrary, a study conducted by Lawal *et al.* (2016:35) indicated that 73.3% of the third year students agreed that the relationship they had with the clinical staff had a positive influence on their learning. As future professional nurses, the students should learn to work effectively with others, as members of the multidisciplinary team (Bruce, Klopper & Mellish, 2011:195).

Regarding human resources, the ratio between the professional nurses and the students had been challenging. The professional nurses had not been able to cope well with the number of students allocated in their areas. A significantly high percentage of the students (71.2%) had responded negatively on the statement about the number of professional nurses allocated to the clinics to facilitate clinical supervision.

Material resources in the PHC practice environment also seemed to be lacking. The availability of material resources, that is, equipment, consumables and access to facilities and resources had all received a very high percentage (mean: 57.3%) of negative responses. These findings were in agreement with the results of the study conducted by Xaba (2015:67), where only 58.3% of the third year students had responded positively regarding the availability of equipment and material resources. In addition, the students highlighted the need for equipment and supplies in the practice learning environment in a study conducted by Abeer & Narvana (2015:41).

Services in the PHC practice learning environment were found to be appropriate and adequate by the students. The students had responded positively regarding the availability of appropriate learning opportunities (82.2%), rotation through all the available health care services (80.1%), exposure to a variety of clinical cases with positive clinical signs (87.7%) and receiving supervised independence in the provision of nursing care (89.7%).

The results of this study further revealed that there were statistically significant differences in the ratings of the primary health care environment in certain sections between the three campuses. Based on these findings, it could be concluded that Campus C, PHC practice learning environments were better in enhancing the students' clinical learning, than Campus A and B practice learning environments. A high percentage of positive responses (20.97% 'strongly agree' and 62.9% 'agree') by the Campus C students regarding the standard of care in these environments, was in agreement with a high percentage of positive responses received on the attitude of the professional nurses towards their work and students, including the respect shown towards the patients and their families. Notably, none of the students in Campus A had strongly agreed, that the professional nurses had been passionate

in their service and only 51% of the students had rated the professional nurses' attitude in their work positively. However, the professional nurses in the Campus C practice learning environments had been passionate and / or enthusiastic in their service delivery, considering a high percentage of positive responses received on this statement.

The findings of this study showed that the professional nurses had not been adequately prepared by the lecturers on the students' clinical learning outcomes in all three campuses, although Campus C was higher when compared with Campus A and B. Furthermore, the results showed that the number of professional nurses allocated at the clinic had not been adequate to facilitate clinical supervision. Based on the results, it was evident that the students had not received enough opportunities to work with other members of the multidisciplinary team at the three Campuses, with the lowest percentage rated on the opportunity to work with optometrists. Based on these findings, the recommendations made in this study can help to strengthen the support the students had received at Campus C primary health care learning environments and improve the support the students had received at Campuses A and B, including Campus C PHC learning environment.

5.3 RECOMMENDATIONS

The following recommendations are made according to the findings of the study:

RECOMMENDATIONS 1: SUPPORT

To adequately prepare the clinical practice environment staff to welcome and support the students before clinical placement, the lecturers should:

- Plan the students' clinical placement collaboratively with clinical staff before clinical placement (National Strategic Plan for Nurse Education and Training (2012/2013-2016/2017:89) and Nursing Education Stakeholders (NES) Group (2012). The product of this collaboration should be a structured plan and / or approach to the clinical placement and teaching. Involving the clinical staff in decision-making motivates them to take responsibility to assist the students rather than being told by the lecturers to expect the students. The NEIs have the responsibility to maintain existing and develop new

collaborative relationships with clinical facilities where students are placed (SANC, [n.d.]:106).

- Develop a structured orientation programme jointly with the clinical staff, including detailed information on the roles and responsibilities expected from each person involved in the students' supervision, including the role of the administrative staff. This support will ensure that the students receive proper orientation in all the PHC facilities. Planned learning programmes with activities help create an environment that is conducive for students' learning (Darcy Associates Consulting Services, 2009:76). This support will ensure that the students receive proper orientation in all the PHC facilities.
- Avail and explain the clinical learning outcomes the students have to achieve on each clinical placement to the professional nurses. Clear objectives / outcomes and clinical supervisors who are adequately prepared and knowledgeable about the expected learning outcomes optimises learning (Darcy Associates Consulting Services, 2009:76).

To strengthen the supervision of the students during clinical placement, it is imperative for the professional nurses to acknowledge, that the clinical supervision of the students in the PHC practice learning environment does not only assist the students to meet their learning outcomes (Okoronkwo, Onyia-Pat, Agbo, Okpala, Afam & Ndu, 2013:68), but also ensures that the care received by the patients is safe. Therefore:

- Professional nurses should adhere to the PHC principle regarding the patient's safety, that is, the responsibility of ensuring quality care of all the clients entrusted to their care (Hattingh, Dryer & Roos, 2012:75), by always supervising the students when consulting the patients or performing procedures in the PHC practice environment, as non-supervision of the students may have detrimental effects on the health of the patient.
- Delegating duties to the students in such a way, that they are paired with the professional nurses responsible for various programmes, can also ensure that they are always directly or indirectly supervised.

- The memorandum of understanding between the college and the clinical areas regarding the students' clinical placement should clearly state the expectations from each stakeholder, regarding the students' clinical education, including supervision. According the SANC (n.d.:26), the memorandum of agreement between the NEI and clinical institutions should clearly describe the roles and responsibilities of both parties, in addition to the nature of agreement,

The preceptorship and mentorship programmes ensure the adequate guidance and support of the students during placement (Hughes & Quinn, 2013:374,375). The appointment clinical preceptors in the Free State School of Nursing can help improve the extent to which the students are supervised in the PHC practice environment, as the professional nurses responsible for their clinical supervision are faced with high patient workload. Currently, a few nurse educators who have trained in preceptorship are only responsible for the clinical education of the students directly under their care, which has not improved the extent to which the students are supervised. Similarly, the use of experienced members of the PHC practice placement staff to mentor and support the students during placement can benefit the students.

RECOMMENDATIONS 2: LEADERSHIP

Personal and professional behaviour demonstrated by professional nurses towards patients and their families has a direct influence on students' clinical learning (Bos *et al.*, 2015:171).

Professional nurses are expected to possess adequate knowledge of, and implement the following principles of primary health care, to enhance the sharing of information regarding the health status of the patient with them and their families:

- Promote a bottom up approach, where the patients should take part in the planning and implementation of the interventions to improve their own health. Including the patients and their families in matters affecting their health is central to successful primary health care.
- Deliver primary health care in the environment where health promotion takes place. As the key to health promotion, the professional nurses should give

health education to the patients and their families at all levels of disease prevention.

- Provide health services in line with Batho Pele principles (examples, greet patients and their families and protect the patient's rights (Hattingh *et al.*, 2012:71).

The professional nurses should take a central role in creating a practice learning environment which nurtures the clinical learning for the students. In order for PHC to succeed, professional dedication should exist (Hattingh *et al.*, 2012:71). Professional nurses should therefore:

- Demonstrate passion / enthusiasm in their service delivery to encourage and instil a sense of responsibility in the students.
- Be approachable towards the students, to enhance their learning
- Act as role models, as positive role models instil learning about caring to the students (Ma *et al.*, 2014:3; Henderson *et al.*, 2011:196) and motivate them to act as knowledgeable nurses in the future (Nasrin, Soroor & Soodabeh, 2012:5).
- Deliver a high level of care, as they are regarded by the students as qualified and competent to deliver safe care.
- The professional nurses should share their expertise with the students, to develop their professional competence (National Strategic Plan for Nurse Education and Training (2012/2013 -2016/2017:89).

The professional nurses should facilitate the attendance of development opportunities such as meetings and in service education by the students. As junior members of the PHC multidisciplinary team involved in the provision of care, the students deserve the opportunity to access relevant, updated information.

RECOMMENDATIONS 3: COMMUNICATION

Effective partnership between Nursing Education Institutions and the PHC settings crucial in managing students' clinical education Tomietto, Comparcini, Saarikoski, Valentina, Simonetti & Cicolin, 2014:49; Hoven 2014:319). To strengthen the communication between the students, the educational and clinical institutions:

Educational institutions / lecturers should compile and avail a file with clinical learning outcomes the students have to achieve at each clinic. The file should be updated according to the students' learning needs. Furthermore, the educational institutions should orientate the professional nurses on the students' learning outcomes, to enable them to play their supervisory role effectively. Nursing education should facilitate meetings between NEI and PHC clinical facilities, to address the challenges related to the students' clinical learning in the PHC practice environment. Lastly, the professional nurses should provide constructive feedback on the students' performance timeously, to encourage the students to improve their clinical performance.

RECOMMENDATIONS 4: RELATIONSHIPS

As part of the health care team involved in the provision of care, the students should be given opportunities to work with the different members of the multidisciplinary team. Professional nurses should therefore, delegate the students to work with medical practitioners, physiotherapists, occupational therapists, social workers, dieticians, optometrists and pharmacists, when having sessions at the clinic. To avoid missed opportunities, they should be allowed to rotate through the services rendered by different members of the team at the clinic. Where such services are not available, an agreement should be reached between the lecturers and the professional nurses to allocate the students just for a specific period of time in district hospitals when these services are available.

RECOMMENDATIONS 5: MATERIAL AND HUMAN RESOURCES

The responsibility of providing adequate human and material resources lies with the Free State Department of Health. However nurse managers have the responsibility to ensure that sufficient equipment and personnel are available in clinical facilities to enable clinical teaching and learning to take place (Tiwaken, 2015:73).The clinic manager should continue motivating for more resources including the staff. Results of this study should be used as part of the evidence to influence the decision that will be made by the Department of Health (DoH). Furthermore, the professional nurses should encourage the staff, including the students, to use the limited available resources effectively. Clinic managers should also provide the students access to

the facilities, such as a separate room where they can meet and discuss matters related to their learning (Zakaria & Duad, 2009:6; Ernstzen, Statham & Hanekom, 2014:209).

RECOMMENDATIONS 6: ATTITUDE

The professional nurses should demonstrate the appreciation of the role played by the students in patient care. Students are inspired by the positive attitudes displayed by professional nurses, and also by taking part in different roles to become future professionals (Kapucu & Bulut, 2011:1152). In addition, in service education on the ways to acknowledge good performance in both the students and the professional nurses, could also assist the professional nurses to change their attitude. The development and implementation of a structured assessment tool, that could be used by the students to rate the clinical practice learning environments, should be facilitated. A team including the students, the educators and the clinical staff should collaborate on such an initiative.

RECOMMENDATION FOR FURTHER RESEARCH

The current study is linked to a qualitative study on the problems experienced by the student nurses in the primary health care environment conducted by MacKenzie (2010), which included the R425 undergraduate students, second year. It can be deduced that sufficient information has been obtained regarding the students' experiences in the PHC environment in the Free State Province in this programme. The researcher therefore, suggests that future research focus on the development and implementation of relevant / collaborative clinical practice environment programmes and assessment tools. A survey to determine whether the recommendations made by the researcher will be implemented, could also add value to the body of knowledge on effective clinical practice environments.

5.4 LIMITATIONS OF THE STUDY

Some students did not respond to the last two open-ended questions that needed information to support a **NO** response on (section 3.2), the statement where they were expected to indicate whether primary health care workplace environments in the Free State Province, promoted effective clinical learning for the students. Those

who responded gave the same points that formed part of the questionnaire including (section 3.3) that is, areas that needed to be improved. There were no additional inputs from the students on how to improve their clinical learning. Secondly, the study included only one programme, that is, R425 programme. Regarding the comparison of the results between the three campuses, a limitation to the use of 'Chi test' and 'Fisher Exact' test was that there were three campuses and four options for each question compared, as compared to a comparison between two sets of data, which is more accurate.

5.5 CONCLUSION

The responsibility to prepare the students to practice as independent professionals in the primary health care practice settings requires commitment from both the nursing education and the clinical training institutions. This quantitative, descriptive study assisted in providing a picture of the clinical learning in the primary health care practice learning environments. Furthermore, the inclusion of the students from the three campuses of the Free State School of Nursing in this study provided a description regarding the clinical learning in the primary health care environments in the entire School.

On the whole, it could be concluded that primary health care practice learning environments do not adequately enhance the students' clinical learning. The mean of all the positive statements for each component in the practice learning environment ranged between 42.7% and 89.6%. The highest percentages were attributed to the support the students had received before their clinical placement (89.6%), the support the students had received on the commencement of clinical placement (85.4%), the availability of PHC services (84.9%) and attitude (80.0%). The lowest percentages of the positive statements were attributed to the availability of the developmental opportunities for the students (62.8%), the relationships the students had with other members of the multidisciplinary team (55.5%) and the availability of the material resources (42.7%). The results of some of these components of the PHC learning environment were significantly lower, than the standard used at PHC to measure each of the components of an ideal clinic in the dashboard, where one hundred percent (100%) per component was considered ideal, 40-99 as partly

functional and < 40 as non-functional or absent (Fryatt & Hunter 2015:26; DoH 2015:169).

Therefore, it could be concluded that this study helped to identify areas that needed improvement in the primary health care practice learning environment, both in the Free State School of Nursing, as the institution responsible for nursing education and the primary health care clinics, as institutions responsible for the clinical training, to enhance the students' clinical learning. Recommendations made can help improve the support the students receive in the PHC practice environment and enhance their clinical learning. Therefore, these recommendations should be made available to the PHC practice environments and the three FSSoN campuses.

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ADDENDUM A

APPROVAL FROM THE EVALUATION COMMITTEE, UNIVERSITY OF THE FREE STATE

Date: 2 November 2016

Dr. L. van Rhyn
Chairperson: Research Committee School
of Nursing

Dear Dr. L. van Rhyn

REPORT: EVALUATION COMMITTEE: Quantitative studies

Please indicate with x the applicable study:

PhD (NVRT 9100)		MSocSci (NVRT8900)	x	Principal investigator	
Thesis		Dissertation	x	Publishable Articles	

Please complete:

Title of the study:	A DESCRIPTION OF THE PRIMARY HEALTHCARE PRACTICE LEARNING ENVIRONMENT: A STUDENT PERSPECTIVE
Candidate:	JOYCE MOSIA
Supervisor:	PROF A JOUBERT
Co-Supervisor:	-

Members of the Evaluation Committee:

Fixed members:

Please indicate in the blocks one of the options:
Present (P) Absent (A) Not applicable (NA)

Head: Research Portfolio AND applicable niche lead researcher OR a member of the SoN

Dr. L. van Rhyn	Head: Research Portfolio	
Prof. Y. Botma	Niche area: Innovative tools in health teaching	X
Or		
Dr. M. Reid	Niche area: Health Communication	
Or		
Dr. D. Botha	Only for proposal on child and maternal health	
Or		
Member of SoN		

Please indicate in the blocks one of the options:
Present (P) Absent (A) Not applicable (NA)

Additional members : (Please complete by filling in the names and if they are present, absent or not applicable)

Name: Cornel van Rooyen Tel: 0514013114 E-mail: VanrooyenFC@ufs.ac.za	Two experts from outside SoN (Research and Field expert, email address or cell no of both experts)	x
Name: Ronette Hough Tel: 0514012836 E-Mail: HoughPA@ufs.ac.za		x
Name: Prof A Joubert Cell no: 082 8208771 E-mail: gnvkaj@ufs.ac.za	Supervisor	x
Name: Joyce Mosia Cell no: 0723994508 E-mail: Joyce Mosia <joycemosia95@gmail.com>	Student	x

--	--	--

Recommendations from Evaluation Committee:

Title: It was recommended that the title of the study be changed.
 Conceptual framework: Transfer of learning replaced with practice learning environment
 Research design: Cross-sectional
 Questionnaire: Minor changes to statements and components addressed included support and leadership [
 Content: Education design added to the study context
 Objectives: Sub-objective to compare the perspective at the three campuses to accommodate comparison
 Data collection: Power coercion addressed

24 October 2016

Committee was satisfied. Student may submit to HSREC with approval of amendments by supervisor.

Supervisor Chairperson Signature Signature

[Handwritten Signature]

[Handwritten Signature]

ADDENDUM B

**APPROVAL FROM THE ETHICAL COMMITTEE,
UNIVERSITY OF THE FREE STATE**

15 February 2017

SJ MOSIA
SCHOOL OF NURSING
FACULTY OF HEALTH SCIENCES
UFS

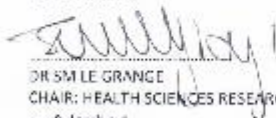
Dear SJ Mosia

HSREC 05/2017 [UFS-HSD2017/0013]

PROJECT TITLE: A DESCRIPTION OF THE PRIMARY HEALTHCARE PRACTICE LEARNING ENVIRONMENT: A STUDENT PERSPECTIVE

1. You are hereby kindly informed that the Health Sciences Research Ethics Committee (HSREC) approved this protocol after all conditions were met. This decision will be ratified at the next meeting to be held on 28 February 2017.
2. The Committee must be informed of any serious adverse event and/or termination of the study.
3. Any amendment, extension or other modifications to the protocol must be submitted to the HSREC for approval.
4. A progress report should be submitted within one year of approval and annually for long term studies.
5. A final report should be submitted at the completion of the study.
6. Kindly use the HSREC NR as reference in correspondence to the HSREC Secretariat.
7. The HSREC functions in compliance with, but not limited to, the following documents and guidelines: The SA National Health Act, No. 61 of 2003; Ethics in Health Research: Principles, Structures and Processes (2015); SA GCP(2005); Declaration of Helsinki; The Belmont Report; The US Office of Human Research Protections 45 CFR 461 (for non-exempt research with human participants conducted or supported by the US Department of Health and Human Services- (HHS), 21 CFR 50, 21 CFR 56; CIOMS; ICH-GCP-E6 Sections 1-4; The International Conference on Harmonization and Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH Tripartite); Guidelines of the SA Medicines Control Council as well as Laws and Regulations with regard to the Control of Medicines, Constitution of the HSREC of the Faculty of Health Sciences.

Yours faithfully



DR SM LE GRANGE
CHAIR: HEALTH SCIENCES RESEARCH ETHICS COMMITTEE
cc: A Joubert



ADDENDUM C (TITLE MODIFIED)

**APPROVAL FROM THE ETHICAL COMMITTEE,
UNIVERSITY OF THE FREE STATE**

IRB nr 00006240
REC Reference nr 230408-011
IORG0005187
FWA00012784

08 November 2017

SJ MOSIA
SCHOOL OF NURSING
FACULTY OF HEALTH SCIENCES
UFS

Dear SJ Mosia

HSREC 05/2017 (UFS-HSD2017/0013)

PROJECT TITLE: STUDENTS' PERSPECTIVES ON THE PRIMARY HEALTHCARE PRACTICE LEARNING ENVIRONMENT

With reference to the letter dated 01 March 2017, this letter replaces the aforementioned letter.

1. You are hereby kindly informed that, at the meeting held on 28 February 2017, the Health Sciences Research Ethics Committee (HSREC) approved this protocol after all conditions were met.
2. The Committee must be informed of any serious adverse event and/or termination of the study.
3. Any amendment, extension or other modifications to the protocol must be submitted to the HSREC for approval.
4. A progress report should be submitted within one year of approval and annually for long term studies.
5. A final report should be submitted at the completion of the study.
6. Kindly use the **HSREC NR** as reference in correspondence to the HSREC Secretariat.
7. The HSREC functions in compliance with, but not limited to, the following documents and guidelines: The SA National Health Act, No. 61 of 2003; Ethics in Health Research: Principles, Structures and Processes (2015); SA GCP (2006); Declaration of Helsinki; The Belmont Report; The US Office of Human Research Protections 45 CFR 461 (for non-exempt research with human participants conducted or supported by the US Department of Health and Human Services- (HHS), 21 CFR 50, 21 CFR 56; CIOMS; ICH-GCP-E6 Sections 1-4; The International Conference on Harmonization and Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH Tripartite), Guidelines of the SA Medicines Control Council as well as Laws and Regulations with regard to the Control of Medicines, Constitution of the HSREC of the Faculty of Health Sciences.

Yours faithfully



DR SM LE GRANGE
CHAIR: HEALTH SCIENCES RESEARCH ETHICS COMMITTEE
cc: A Joubert



ADDENDUM D

**APPROVAL FROM THE FACULTY OF HEALTH
SCIENCES, UNIVERSITY OF THE FREE STATE**

UNIVERSITY OF THE
FREE STATE
UNIVERSITEIT VAN DIE
VRYSTAAT
YUNIBESITHI YA
FREISTATA



School of Nursing
Skool vir Verpleegkunde
Nelson Mandela Avenue/Rylands |
P.O. Box / Posbus 339 |
Bloemfontein, 9500 | RSA
tel: +27 (0)51 401 9111
www.ufs.ac.za

8 February 2017
051 401 2246

Mrs M Marais
Head: Health Sciences Research Ethics Committee Administration
FHS
University of the Free State
BLOEMFONTEIN
9300

Cc Chairperson HSREC

RE: NVRT8900 S J MOSIA STUDENT NUMBER 2013159302

TITLE: A DESCRIPTION OF THE PRIMARY HEALTHCARE PRACTICE LEARNING ENVIRONMENT: A STUDENT PERSPECTIVE

Hereby I would like to confirm that Mrs S J Mosia is registered at the School of Nursing for a MSocSci(Nursing). The title of her study is as stated above.

I do support Mrs Mosia's studies. Prof A Joubert will provide the necessary supervision.

Regards

PROF M MULDER
HEAD: SoN



ANNEXURE A: PERMISSION VICE-RECTOR ACADEMIC



HEALTH SCIENCES RESEARCH ETHICS COMMITTEE

APPROVAL FROM UFS AUTHORITIES FOR PARTICIPATION OF STUDENTS/STAFF IN RESEARCH PROJECTS

Title, Initials, Surname:	Mrs S.J. Mosia	Staff/Student number	2013159302
Department/Institution:	SCHOOL OF NURSING, FACULTY OF HEALTH SCIENCES		
Phone:	0723994508	E-mail address:	Joycemosia95@gmail.com
Supervisor(s):	Prof A. Joubert	Phone:	051 401 3477


Protocol Title:	A description of the primary healthcare practice learning environment. A student perspective.
------------------------	--


Who will be involved in the study? (tick ✓)	<input type="checkbox"/> UFS Personnel	<input checked="" type="checkbox"/> Students
--	--	--


INSTRUCTIONS:

- I. Please attach the following to this form when requesting approval from the signatories:
 - a. The study protocol; and
 - b. The Health Sciences Research Ethics Committee (HSREC) application form.
- II. Kindly note that it is the responsibility of the researcher(s) to ensure that all relevant signatures are obtained before this signed form is returned to HSREC Administration (D104) Francois Retief Building, Faculty of Health Sciences, UFS. The protocol may, however, be submitted for HSREC approval while signatures are being obtained.

- III. Please choose either section A OR B below.
- IV. Section C is mandatory for all research on campus.

A. FOR RESEARCH ON UFS STUDENTS AND/OR STAFF FROM A SPECIFIC FACULTY, BOTH THE FOLLOWING SIGNATURES MUST BE OBTAINED:		
I. HEAD OF SCHOOL (IF APPLICABLE):	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Not Approved
Signature: 	Date: 19/1/17	
Prof M Mulder		
Comments:		



II. DEAN OF FACULTY:	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Not Approved
Signature: 	Date: 19/1/17	
Prof G van Zyl		
Comments:		

OR

B. FOR RESEARCH ON INTERFACULTY UFS STUDENTS AND/OR STAFF AND/OR STUDENTS IN UFS RESIDENCES, THE FOLLOWING SIGNATURE MUST BE OBTAINED:		
I. DEAN: STUDENT AFFAIRS	<input type="checkbox"/> Approved	<input type="checkbox"/> Not Approved
Signature:	Date:	
Comments:		

AND

C. ALL RESEARCH ON STUDENTS AND/OR STAFF TO BE APPROVED BY:		
I. VICE-RECTOR: RESEARCH	<input type="checkbox"/> Approved	<input type="checkbox"/> Not Approved
Signature:	Date:	
Prof C Witthuhn	27/01/2017	
Comments:		

Die Universiteit van die Vrystaat
The University of the Free State

2017 -01- 27

Prof. R.C. Witthuhn
VISEKTOUR: NAVORSING
VICE RECTOR: RESEARCH

Prof. Corli Witthuhn
Viserektor:Navorsing - Vice Rector:Research
Universiteit van die Vrystaat
University of the Free State
Hoofgebou KB1 Tel. 051 - 401 2116

ADDENDUM E:

**APPROVAL FROM THE PRINCIPAL, FREE STATE
SCHOOL OF NURSING**

PERMISSION FREE STATE SCHOOL OF NURSING PRINCIPAL

Date

The PRINCIPAL
Free State School of Nursing
Bloemfontein
9300

RE: PERMISSION TO CONDUCT A RESEARCH STUDY

STUDY TITLE: A DESCRIPTION OF THE PRIMARY HEALTHCARE PRACTICE LEARNING ENVIRONMENT: A STUDENT PERSPECTIVE

I am the head of Community Nursing Science department at the Free State School of Nursing, presently registered for Master Degree (Nursing) with the University of Free State in Bloemfontein. I hereby request permission conduct a research study as stated above.

The research will be conducted at the three sub-campuses of the Free State School of Nursing (FSSON). Study participants will be third year diploma student nurses and they will be engaged for approximately 30 minutes in the study. The aim of the study is to describe the primary healthcare practice learning environment from a student perspective.

The results of the study will be published in accredited journals and presented at meetings, workshops and conferences.

Contact details: Office – 058 718 3259, Home- 058 713 6500, Mobile – 072 399 4508.

I hope my request will be favourably considered.

Yours faithfully,

Mrs S.J. Mosia



health

Department of
Health
FREE STATE PROVINCE

INTERNAL MEMO

DATE:	6 January 2017	FILE NO:	
TO:	Me SJ Mosia	FROM:	MA Mabandla, Principal FSSON Kolbe Street Tel: 051- 448 8052 Fax: 051- 430 6469 Email: MabandlaMA@fshhealth.gov.za

Approval for conducting research in Free State School of Nursing: Third Year Students

1. The above mentioned matter bears reference
2. You are hereby informed that you are approve to conduct research at Free State School of Nursing as per your request.
3. You are reminded to submit approval from the Ethics Committee of the University before commencing with the research
4. Wishing you success with your studies.

Warm regards,

MA Mabandla
Principal



ADDENDUM F
APPROVAL FROM THE NORTHERN CAMPUS
HEAD, FREE STATE SCHOOL OF NURSING



FREE STATE SCHOOL OF NURSING



health

Department of
Health
FREE STATE PROVINCE

FSSON Northern Campus Private Bag X290 WELKOM 9460
TEL No. (057) 396 6240/1/2/3 FAX No. (057) 396 3719

DATE:	03 February 2017	FILE NO:	
TO:	Mrs Mosia SJ	FROM:	L.E Parkies

SUBJECT: Re – Permission to Conduct a Research Study

Your letter dated 02.02.2017 regarding the matter above is hereby acknowledged and refers.
Permission to conduct research study at the Free State School of Nursing: Northern campus is hereby granted.
Wishing you all success in your studies

Regards

L.E.Parkies (Acting Head of Campus)

PARKIES L.E.
03 FEB 2017
HEAD OF DEPARTMENT
FSSON NORTH

ADDENDUM G
APPROVAL FROM THE EASTERN CAMPUS
HEAD, FREE STATE SCHOOL OF NURSING



health

Department of
Health
FREE STATE PROVINCE

INTERNAL MEMO

DATE:	06.02.2017	FILE NO:	
TO:	Mrs Mosia S J (Masters student)	FROM:	Me M M Mokoena-Mvandaba: Head of Campus

SUBJECT: RE-PERMISSION TO CONDUCT A RESEARCH STUDY

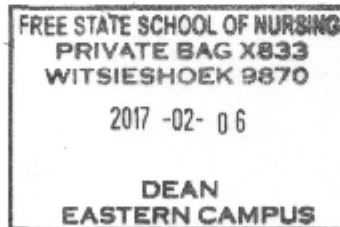
Your letter dated 06.02.2017 regarding the matter above is hereby acknowledged and refers.

Permission to conduct the research study at the Free State School of Nursing: Eastern Campus is hereby granted.

Wishing you all the success in your studies

Regards


Me M M Mokoena-Mvandaba (Head of Campus)



ADDENDUM H

**APPROVAL FROM THE SOUTHERN CAMPUS
HEAD, FREE STATE SCHOOL OF NURSING**



health

Department of
Health
FREE STATE PROVINCE

06 February 2017

Free State School of Nursing
Southern Campus
Private Bag X20520
Bloemfontein
9300

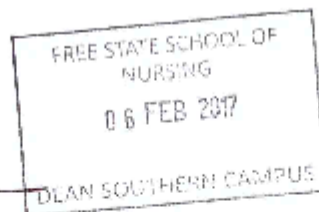
TO WHOM IT MAY CONCERN

Sir/ Madam

This serves as confirmation that I, the undersigned Head of Southern Campus of the Free State School of Nursing, hereby grant Mrs SJ Mosia (Head of Community Nursing Science department at the Free State School of Nursing) permission to conduct a research study on third year Diploma in Nursing and Midwifery students with the study title "A description of the Primary Health care practice Learning Environment"

Thank you

N.M.M. RALIKONYANA
Head of Campus: South
Free State School of Nursing
Bloemfontein



Department of Health • Departement van Gesondheid • Letapha La Bophelo Bo Botle



- N.M.M. Ralikonyana : Head of Campus: Free State School of Nursing: Room 1 , Ground Floor, Kolbe Avenue. BLOEMFONTEIN 9301. Tel: 051-403 9831 Fax: 051-4306469 Email

ADDENDUM I
LETTER OF CONSENT

LETTER OF CONSENT

RESEARCH TITLE: A DESCRIPTION OF THE PRIMARY HEALTHCARE PRACTICE LEARNING ENVIRONMENT. A STUDENT PERSPECTIVE.

You have been asked to participate in a research study.

You have been informed about the study by Mrs Soyi Joyce Mosia.

You may contact Mrs Soyi Joyce Mosia at 072 399 4508 any time if you have questions or concerns about the research.

Your participation is voluntary, you are free to withdraw from the study at any time before or during the completion of the questionnaire, and you will not be penalised or lose benefits if you refuse to participate or decide to terminate participation. There are no costs involved and you will not receive any remuneration for taking part in the study

If you agree to participate, you will be given a signed copy of this document and information sheet, which is a written summary of the research.

You may contact the Secretariat of the Health Sciences Research Ethics Committee (UFS), at telephone number 051 401 7794/5 if you have questions about your rights as a research respondent.

The research study, including the above information, has been verbally described to me. I understand what my involvement in the study means and I agree to participate.

Signature of Respondent	Date
Signature of Researcher	Date

ADDENDUM J
INFORMATION LEAFLET FOR RESPONDENTS

INFORMATION LEAFLET FOR RESPONDENTS

STUDY TITLE: A DESCRIPTION OF THE PRIMARY HEALTHCARE PRACTICE LEARNING ENVIRONMENT: A STUDENT PERSPECTIVE

I, Soyi Joyce Mosia, am conducting a research study on a description of the primary healthcare practice learning from a student perspective. This is a study involving research and is not part of the routine feedback on your experiences following your clinical placement. The aim of the study is to describe the primary healthcare practice learning environment from a student perspective.

You are friendly requested to participate in the research study, as a third year student nurse who has recently (2016) been exposed to primary healthcare practice environments in the Free State Province.

A quantitative, cross-sectional design has been followed to conduct this study and if you agree to participate, you will be requested to complete a questionnaire. It will take you approximately 30 minutes to complete the self-administrative questionnaire. No risks or discomforts are anticipated during completion of the questionnaire. There will be no personal benefits for participating in the study. However, the information provided will be valuable in determining the views of diploma student nurses on their clinical learning and from the results of this study, the reasons why primary healthcare practice environments are not conducive to students' clinical learning can be identified and recommendations on educational and organizational strategies to enhance clinical learning be made.

There will be no costs involved in participating and you will not receive any remuneration for taking part in this study.

The information will be treated as confidential and the results will be published and presented in such a way that respondents will not be identified.

Your participation is voluntary and you are free to withdraw from the study at any time during the completion of the questionnaire without penalty or loss of benefits to which you are entitled as a student.

For further information please contact the researcher on the following telephone number: 072 399 4508. You can also report any complaints or problems to the Secretariat and Chair of the Ethics Committee of the Faculty of Health Sciences, University of the Free State on the following telephone number: (051) 401 7794/5.

ADDENDUM K
QUESTIONNAIRE

QUESTIONNAIRE

TITLE

A DESCRIPTION OF THE PRIMARY HEALTHCARE PRACTICE LEARNING ENVIRONMENT: A STUDENT PERSPECTIVE

Dear respondent,

You have been asked to participate in a research study that aims to describe diploma student nurses' views regarding clinical learning in the primary healthcare practice (workplace) environment. The purpose of this questionnaire is to collect data to assist in the evaluation of nursing students' clinical learning in the primary healthcare practice environment. Please note that by completing this questionnaire you are voluntarily agreeing to participate in this research study. You will remain anonymous and your data will be treated confidential at all times. You may withdraw from the study at any given moment during the completion of the questionnaire. The results will be published and presented in such a way that respondents will not be identified. In such cases signing is not required but an information leaflet must still be available.

GUIDELINES ON HOW TO COMPLETE THE QUESTIONNAIRE:

- 1. When answering the questions please reflect on your placement in the primary healthcare practice environment as a whole and not only a specific clinic.**
2. Please read each question/statement thoroughly before responding.
3. Ask the researcher for clarification if you're unsure of any question/statement.
4. Please respond to each question/statements as honestly and as accurately as possible.
5. Where applicable, respond to a statement by making a cross in the space provided.

SECTION 1 BIOGRAPHIC DATA

1.1 Indicate your age in years.

1.2 Indicate your gender.

Male	1	Female	2
------	---	--------	---

1.3 Indicate the campus where you receive training.

Eastern	1	Northern	2	Southern	3
---------	---	----------	---	----------	---

SECTION 2: PRACTICE LEARNING ENVIRONMENT

Please mark the appropriate block with a cross **X** on the scale provided.

1. Strongly agree (Sa)	2. Agree (A)	3. Disagree (D)	4. Strongly disagree (Sd)
---------------------------	--------------	-----------------	------------------------------

2.1 SUPPORT

Prior to my placement for clinical learning in the primary healthcare (PHC) practice environment the lecturer:

2.1.1	Ensured that I have the necessary theoretical knowledge	Sa	A	D	Sd
2.1.2	Briefed me on the required learning opportunities that I should attend to	Sa	A	D	Sd
2.1.3	Informed me of my role and responsibilities	Sa	A	D	Sd
2.1.4	Informed the nurse-in-charge which learning outcomes I have to achieve	Sa	A	D	Sd

On commencement of my placement:

2.1.5	Administrative staff greeted me politely	Sa	A	D	Sd
2.1.6	Nursing staff welcomed me to the practice environment	Sa	A	D	Sd
2.1.7	I was introduced to the rest of the team members	Sa	A	D	Sd
2.1.8	I received orientation to the practice environment	Sa	A	D	Sd
2.1.9	I learned what the team members expected of me	Sa	A	D	Sd

During my placement:

2.1.10	Adequate clinical supervision was provided by the professional nurses	Sa	A	D	Sd
2.1.11	Professional nurses made suggestions on how I could improve my clinical performance	Sa	A	D	Sd
2.1.12	Clinical support to address my learning needs was rendered by a lecturer/clinical teacher	Sa	A	D	Sd
2.1.13	A professional nurse always supervised me while I was consulting a patient	Sa	A	D	Sd
2.1.14	A professional nurse always supervised me while I was performing a clinical procedure	Sa	A	D	Sd
2.1.15	I experienced the practice environment as nurturing	Sa	A	D	Sd
2.1.16	I was encouraged to reflect on my nursing actions	Sa	A	D	Sd
2.1.17	I was encouraged to take initiative regarding daily nursing activities	Sa	A	D	Sd
2.1.18	I found that the nursing care was aligned with what I have learned in nursing theory	Sa	A	D	Sd

2.2 LEADERSHIP

The Professional Nurses:

2.2.1	<i>Showed respect towards the patient as a healthcare consumer/user: They...</i>				
2.2.1.1	Greeted the patients when they arrived for consultation	Sa	A	D	Sd
2.2.1.2	Explained to patients what their current health condition entails	Sa	A	D	Sd
2.2.1.3	Discussed the patient's treatment plan with him/her	Sa	A	D	Sd
2.2.1.4	Explained to patients how their prescribed treatment/medication works	Sa	A	D	Sd
2.2.1.5	Gave health education	Sa	A	D	Sd
2.2.2	<i>Showed respect to a patient's family member(s): They...</i>				
2.2.2.1	Greeted family member(s) when they accompanied the patient	Sa	A	D	Sd
2.2.2.2	Explained to family member(s) what the patient's current health condition entails	Sa	A	D	Sd
2.2.2.3	Discussed the patient's treatment plan	Sa	A	D	Sd
2.2.2.4	Explained how the patient's prescribed treatment/medication works	Sa	A	D	Sd
2.2.2.5	Provided health education related to home-based care	Sa	A	D	Sd
2.2.3	Were passionate (enthusiastic) in their service delivery	Sa	A	D	Sd
2.2.4	Protected patient rights (e.g. safety and dignity)	Sa	A	D	Sd
2.2.5	Delivered a high standard of care	Sa	A	D	Sd
2.2.6	Shared their expertise (e.g. knowledge and skills)	Sa	A	D	Sd
2.2.7	Acted as role models	Sa	A	D	Sd
2.2.8	Maintained a professional appearance (uniform, epaulettes, qualification bars, broach and name tags)	Sa	A	D	Sd
2.2.9	Encouraged me to become a competent professional nurse	Sa	A	D	Sd

2.2.10	<i>Allowed me to attend development opportunities such as:</i>				
2.2.10.1	Meetings	Sa	A	D	Sd
2.2.10.2	In-service training	Sa	A	D	Sd
2.2.10.3	Clinical demonstrations	Sa	A	D	Sd

2.3 RELATIONSHIPS

In the primary healthcare practice environment:

2.3.1	I was allowed to be actively involved in rendering PHC services as a junior member of the nursing team	Sa	A	D	Sd
2.3.2	<i>I was given the opportunity to work with other health professionals:</i>				
2.3.2.1	Medical practitioners	Sa	A	D	Sd
2.3.2.2	Social workers	Sa	A	D	Sd
2.3.2.3	Pharmacists	Sa	A	D	Sd
2.3.2.4	Nutritionists/dieticians	Sa	A	D	Sd
2.3.2.5	Occupational therapists	Sa	A	D	Sd
2.3.2.6	Physiotherapists	Sa	A	D	Sd
2.3.2.7	Optometrists	Sa	A	D	Sd
2.3.3	I felt welcomed by the team members during my PHC placement	Sa	A	D	Sd
2.3.4	I was supported by the team members as a junior member of the nursing team	Sa	A	D	Sd

2.4 ATTITUDE

In the primary healthcare practice environment:

2.4.1	The atmosphere was pleasant for clinical learning	Sa	A	D	Sd
2.4.2	The staff was approachable towards students	Sa	A	D	Sd
2.4.3	I received recognition for my contribution to patient care	Sa	A	D	Sd
2.4.4	I was encouraged by team members to ask questions regarding patient care	Sa	A	D	Sd

2.5 COMMUNICATION

In the primary healthcare practice environment:

2.5.1	I was aware that a file compiled by the lecturer(s), stating the clinical learning outcomes I had to achieve, was available at the different clinics	Sa	A	D	Sd
2.5.2	Professional nurses were orientated by the lecturer(s) regarding my clinical learning outcomes in order to obtain their support	Sa	A	D	Sd
2.5.3	Communication between the professional nurses at the clinics and the lecturer(s) regarding my clinical learning was efficient	Sa	A	D	Sd
2.5.4	Communication between the team members was sufficient to promote patient care	Sa	A	D	Sd
2.5.5	Communication between me and the lecturer(s) to address any problems that impact on clinical learning was efficient	Sa	A	D	Sd
2.5.6	I received prompt feedback from the professional nurse(s) on my clinical performance	Sa	A	D	Sd
2.5.7	I received prompt feedback from the lecturer(s) on my clinical performance	Sa	A	D	Sd
2.5.8	The feedback I received helped me to improve my clinical performance	Sa	A	D	Sd
2.5.9	I asked for assistance to perform procedures that I was not familiar with	Sa	A	D	Sd

2.6 HUMAN RESOURCES

In the primary healthcare work environment:

2.6.1	The number of professional nurses allocated at the clinic is sufficient to facilitate clinical supervision (one-to-one ratio, meaning a professional nurse for each student)	Sa	A	D	Sd
2.6.2	The number of students allocated per clinic was	Sa	A	D	Sd

	according to the agreement made between the nursing school and the practice setting				
2.6.3	Professional nurses are given opportunities for personal, professional growth and development to increase their clinical knowledge	Sa	A	D	Sd
2.6.4	Professional nurses have sufficient skills to act as role models	Sa	A	D	Sd
2.6.5	Professional nurses were qualified in PHC	Sa	A	D	Sd

2.7 MATERIAL RESOURCES

In the primary healthcare practice environment:

2.7.1	Adequate equipment were available to provide safe nursing care	Sa	A	D	Sd
2.7.2	Adequate consumables were available to provide safe nursing care	Sa	A	D	Sd
2.7.3	I had access to all facilities and materials necessary to facilitate my learning	Sa	A	D	Sd

2.8 SERVICES

In the primary healthcare work environment:

2.8.1	Appropriate learning opportunities were available to allow students' learning outcomes to be achieved	Sa	A	D	Sd
2.8.2	I rotated through all the available healthcare services at the clinic	Sa	A	D	Sd
2.8.3	I was exposed to a variety of clinical cases with positive clinical signs that exposed me to realities of nursing care	Sa	A	D	Sd
2.8.4	I received supervised independence in the provision of nursing care	Sa	A	D	Sd

SECTION 3: GENERAL

3.1 In your opinion, do primary healthcare workplace environments in the Free State Province promote effective clinical learning for students?

Yes	1	No	2
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3.2 Please provide an explanation

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3.3 What do you think should be improved to optimise clinical learning?

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THANK YOU FOR YOUR PARTICIPATION