A DESCRIPTION OF NURSE AND MIDWIFERY EDUCATORS' SELF-DIRECTION IN LEARNING IN LESOTHO

by

Maseisa Jane Ramokhitli

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Supervisor: Prof. A Joubert, PhD Nursing

Co-supervisor: Dr M Wilke, PhD. Nursing

Student number: 2013164070

DECLARATION

I hereby declare that the dissertation for the MSocSci (Nursing) submitted to the University of the Free State, is my independent effort and has not been submitted to/in any other university/faculty for the same qualification. I furthermore waive copyright of the dissertation in favour of the University of the Free State.

J. Ramokhitli ..... 29/10/2018 .....

Maseisa Jane Ramokhitli — Date

SUMMARY

It is crucial to describe self-direction of nurse and midwifery educators in learning in Lesotho – especially now that Lesotho nurses training institutions have moved from content-based curricula to competency-based curricula. The description of their self-direction will help in making recommendations for support and maintenance of the curriculum.

Lesotho educators changed the content curriculum to competency-based curricula to satisfy the Nurses and Midwives strategic plan of the Ministry of Health, which indicates that nurses need to have various skills to function independently in hard-to-reach areas of Lesotho, where other health professionals are few.

The research question was: To what extent do nurse and midwifery educators in Lesotho have self-direction in learning? The study answered the question and the recommendations were made based on the study results. The measurement tool used was the Personal Responsibility Orientation-Self-Directed Learning Scale adopted and adapted. In measuring self-direction, two components and their factors were determined, namely self-development: preparedness to implement, which was adapted and originally phrased as 'professional development: preparedness to implement'. Another factor was the educators' characteristic component.

The design of the study comprised a quantitative cross-sectional descriptive design. The design allowed the researcher to collect objective numerical data based on components mentioned as well as their context.

The population of the study involved 75 nurse and midwifery educators from all six nurses training institutions in Lesotho offering the Diploma in General Nursing, Diploma in Midwifery and the Bachelor's Degree in General Nursing and Midwifery. No sampling was done, meaning all 75 were eligible to participate but only 62 completed the questionnaire. A pilot study was done initially at one institution with a small number of educators.

The study was approved by the Ethics Committee of the Faculty of Health Sciences at the University of Free State, the Lesotho Ministry of Health, the Christian Health Association of Lesotho, as well as individual nurses training institutions. The respondents

were issued an information leaflet, and on acceptance to participate, the self-administered questionnaire was given to respondents by the fieldworkers.

Coding of the questionnaires was done, after which data was captured and verified. Analysis was done by a biostatistician from the Department of Biostatistics at the University of Free State. The spreadsheet was used, where numerical variables were summarised. Categorical variables were summarised by frequencies and percentiles.

Validity and reliability were ensured by employing experts in the field of higher education to ensure face validity by checking that the questionnaire measured what it was intended to measure. Adaption of the questionnaire by changing the word 'students' to 'educators' was done by a committee of experts. Reliability was not threatened because respondents completed similar questionnaires.

Educators' self-direction was 82.40% and was excellent according to the scale.

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CONTENTS

LIST OF ACRONYMS

CHAL	Christian Health Association of Lesotho
CHE	Council on Higher Education
CPD	continuing professional development
MoH	Ministry of Health
NEPI	Nursing Education Partnership Initiative
NHTC	national health training college
NTI	nurses training institution
NUL	National University of Lesotho
ODL	open-distance learning
PBL	problem-based learning
PRO-model	Personal Responsibility Orientation model
PRO-SDLRS	Personal Responsibility Orientation-Self-Directed Learning Readiness Scale
PRO-SDLS	Personal Responsibility Orientation-Self-Directed Learning Scale
SD	self-direction
SDL	self-directed learning
SDLRS	Self-Directed Learning Readiness Scale
UFS	University of Free State

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CHAPTER 1: ORIENTATION TO STUDY

"Self-direction in learning is a way of life" (Brockett & Hiemstra, 1991)

1.1 INTRODUCTION AND BACKGROUND

Self-direction in learning is an umbrella concept that includes self-directed learning (SDL), which refers to the instructional method processes, and personal self-direction (SD) that refers to the person's personality characteristics. The study of personal self-direction has been explored on two perspectives; process and personal attributes, while research focused on verification of SDL among adults and models for understanding SDL (Song & Hill, 2007: 27). Over and above, various models emphasize context factor in internalizing SD (Brockett & Hiemstra, 1991; Song & Hill, 2007: 29; Stockdale & Brockett, 2011: 162). In adult learning SD is described as a 'misunderstood' concept, fraught with confusion, compounded by numerous concepts, such as, self-planned learning, self-teaching, autonomous learning, independent study and distance education that are used interchangeably (Yuan, et al., 2012, p. 427). The stated concepts could be considered as benefits or advantages of SDL inclusive of increased choice, motivation, confidence and lifelong learning (Brockett & Hiemstra, 1991; Montin and Koivisto, 2014: 1; Yuan, Williams, Fang & Pang, 2012: 427; Zhang, Zeng, Chen & Li, 2012: 570). Several views including an early view of self-education, a lifelong learning perspective of SD, SDL and schooling, a learning process perspective and an evolving perspective, developed over time (Brockett & Hiemstra, 1991).

The early view of self-education seemed to refer to information or knowledge acquirements made without a teacher or events without oral instruction. Opposed to the early view of self-education, the lifelong learning perspective refers to learning that takes place throughout a lifetime. SDL and schooling include the characteristics of schooling and distinguishes between schooling in democratic and autocratic societies (Brockett & Hiemstra, 1991). Considering the learning process perspective, the

educator assumes responsibility for the identification of needs and ways to reach outcomes. An evolving perspective illustrated by Brookfield (1980, as cited in Brockett & Hiemstra, 1991) consider individuals' different or own views of self-direction in learning (Brockett & Hiemstra, 1991). In general, self-directedness and SDL could be described as follows:

Self-directedness is conceived and synonymous with self-instruction in which people take control of the dynamics to educate themselves on a particular subject (Brockett & Hiemstra, 1991).

Secondly, self-directedness is conceived as a form of individual autonomy, called self-teaching, autonomy meaning taking control of the objectives and targets of learning and giving it a direction (Cadorin, Bortoluzzi & Palese, 2013: 1511; Cadorin, Suter, Dante, Williamson, Davetti, & Palese, 2012: 153; Stockdale & Brockett, 2011: 163).

Self-direction in learning has been defined by different authors as a process in which individuals takes the initiative as independent agents to assume primary responsibility to diagnose their learning needs, plan, implement and evaluate their learning outcomes (Montin & Koivisto, 2014: 1; Murad, Coto-Yglesias, Varkey, Prokop & Murad, 2010: 1058; Stockdale & Brockett, 2011: 164;). The core components in defining self-direction in learning are independence, autonomy and the responsibility to initiate setting of learning goals, and the identification of learning needs (Klunklin, et al., 2010, 177; Tao, et al., 2015, 1119).

In the current study, Brockett and Hiemstra's (1991) concept of self-direction in learning, as embedded in their personal responsibility orientation model (PRO-model) was used (Figure 1.2). Self-direction in learning, according to Brockett and Hiemstra (1991), is an umbrella concept, which includes both an external and internal component. The external component is linked to the characteristics of an instructional process, whereas the internal characteristics have to do with individuals taking primary responsibility for a learning experience.

Both views were applied to describe nurse educators' self-direction in learning in different curricula in Lesotho, instead of applying the concept to learners as indicated in the PRO-model. An adapted Personal Responsibility Orientation-Self-Directed Learning Scale (PRO-SDLS) and a Personal Responsibility Orientation-Self-Directed Learning Readiness Scale (PRO-SDLRS) was used to measure self-direction in learning of nurse educators (Stockdale & Brockett, 2011: 167). A quantitative cross-sectional descriptive study was done on Lesotho nurse and midwifery educators' with regard to self-direction in learning.

Background

The Nurses Training Institutions (NTIs) in Lesotho embarked on shifting from a content, to a competency-based curriculum. The mentioned institutions initiated this curriculum change in order to address priorities stated in the Ministry of Health Strategic Plan for Nurses and Midwives (Lesotho, 2010: 10). Nurses and midwives, often have to render healthcare services without the support of medical doctors in hard to reach areas (Lesotho, 2010: 10). It is essential for these nurses and midwives to have a variety of competencies to act as independent practitioners (Lesotho, 2010: 34). Lesotho is part of the Nursing Education Partnership Initiative (NEPI) in Africa. NEPI supports the training of more and better-qualified nurses and midwives and offer nursing education institutions the opportunity to benchmark nursing education with other countries. This partnership has led to the nurse educators' decision that a competency-based curriculum should be implemented in Lesotho in line with the Nurses and Midwifes Strategic plan with the assistance of NEPI (Botma, 2014: 24; Lesotho, 2010).

The implementation of the competency-based curriculum necessitates different competencies and resources from nurse educators. These competencies were not essential in a content-based curriculum that aligns with a behaviourist approach. Implementing a competency-based curriculum requires a shift from a behaviourist to a constructivist approach which entails the built of knowledge by people (Karameta,

n.d., 329) approach. In some constructivist approaches, nurse educators need to be self-directed, responsible for their action and resist drifting back to a content-based approach (Botma, 2014: 26; Schoneman, Simandl, Hansen & Garrett, 2014: 373). The focus should be to facilitate the development of competent nurse practitioners through innovative teaching and learning strategies. SDL is in itself an important teaching competency (Chen, Hsu and Hsieh, 2012: 142; Kenner & Weinerman, 2011: 88).

Higher education research suggests that self-directedness is an important trait for individuals enrolled in a programme aligned with a constructivist approach. Self-directedness would enable students to achieve personal- and group-based learning outcomes (Williams & Brown, 2013: 430; Yuan *et al.*, 2012: 429).

The concepts self-directedness and self-direction in learning are addressed in numerous nursing and medical studies, and as a matter of fact were always used interchangeably (Abraham, Fisher, Kamath, Izzati, Nabila & Atikah, 2011; Baker, 2012; Chen *et al.*, 2012; Grandinetti, 2013; Yuan *et al.*, 2012: 427). The nurse educators' self-directedness in teaching and learning is an important competency to enhance the students' self-directedness (Chen *et al.*, 2012: 144). Furthermore, the effectiveness of an educational program influences the knowledge, attitudes and beliefs, and those were attributes of SDL. The behaviour of evidence-based practice in undergraduate nursing students also promote independent learning and cooperative abilities through self-direction in learning strategies (Zhang *et al.*, 2012: 571).

Yuan *et al.* (2012: 429) did not find any difference of self-directedness based on gender, but senior students as well as students with experience in small group learning, self-direction in learning, and problem-based learning achieved higher scores in SDL readiness, than those without such experience.

Educator's self-directedness significantly correlated with teaching competence. Internal locus of control and SDL were significant independent predictors of teaching competence. The clinical nurse preceptor, with willingness to do his/her job always

demonstrated high SDL. Furthermore, the clinical nurse preceptors with a tendency toward internal control showed higher teaching competence than those with tendency toward external control. In other words, teaching competence rose as SDL increased (Chen *et al.*, 2012: 142).

The researcher considered the studies by Chen *et al.* (2012: 146) and Zhang *et al.* (2012: 573), that there is a statistical significant positive, medium magnitude correlation between SDL and teaching competence as important findings for the current study.

1.2 PROBLEM STATEMENT

Nurses Training Institutions (NTIs) in Lesotho are implementing a competency-based curriculum. Nurse and midwifery educators' level of self-directedness is crucial to the implementation of the mentioned curriculum (Seifert, Newbold & Chapman, 2016: 7; Shin, 2012: 37). Self-directedness of nurse and midwifery educators in Lesotho has not been described before. Describing the educators' level of self-directedness might enable NTIs to render the necessary support to the educators regarding the implementation and maintenance of the new curriculum.

1.3 AIM

The aim of the study was to describe the extent to which Lesotho nurse and midwifery educators have self-direction in learning.

1.3.1 Objective

The objective of the study was to:

Describe the Lesotho nurse and midwifery educators' self-direction in learning according to their locus of control, initiative, self-efficacy and motivation, within their social context by means of the adapted PRO-SDLS (Stockdale & Brockett, 2011: online).

1.4 RESEARCH QUESTION

The following research question addressed the stated aim and objectives:

To what extent do nurse and midwifery educators in Lesotho have self-direction in learning?

1.5 CONCEPT CLARIFICATION AND OPERATIONALISATION

Hereby follows clarification of the main concepts related to the study:

1.5.1 Lesotho as a site for the study

Lesotho is a landlocked, mountainous country surrounded by the Republic of South Africa. Its altitude ranges between 1300 and 3500 meters above sea level. This country is divided into ten administrative districts, with Maseru being the capital. Seventy per cent of the total population of 1.8 million live in the rural areas (Lesotho Population census, 2006, as cited in Lesotho, 2010: 18). A map of Lesotho is available in Figure 1.1 There are six NTIs in Lesotho namely; Nursing Department at the National University of Lesotho (NUL), National Health Training College (NHTC) and the four colleges which constitute the Christian Health Association of Lesotho (CHAL). CHAL comprises of the Maluti Adventist College, Roma College of Nursing, Scott School of

Nursing and Paray School of Nursing. The NTIs are depicted in Figure 1.1. The four CHAL Schools of nursing are associated with a hospital with which they share facilities and resources (Botma, 2012: 12).

*1 = Maluti Adventist College, 2 = National Health Training College, 3 = Nursing Department National University of Lesotho, 4 = Roma College of Nursing, 5 = Scott School of Nursing, 6 = Paray School of Nursing

Figure1.1 Lesotho and the location of the NTIs

1.5.2 Nurses and Midwifery educator defined

A nurse and midwife that specialises in nursing education and is registered as such under the provision of Nurses and Midwives Act (12 of 1998) of the Lesotho Nursing Council (Lesotho, 1998). A nurse and midwife with a qualification in nursing education can teach any nursing programme at NTIs. In the context of the study, it includes nurse and midwifery educators that teach the Diploma in General Nursing, Diploma in Midwifery and the Bachelor of General Nursing and Midwifery in Lesotho.

1.5.3 Self-direction in learning

Self-direction in learning is an umbrella concept that includes the instructional method processes and personal self-direction that refers to the person's personality characteristics (Brockett & Hiemstra, 1991: online). In this study, the same definition was used to guide the researcher. **The emphasis was on the self-direction in learning of the nurse and midwifery educators and not the learners or students.** In order to align the concepts in the model with the aim of the study, the researcher opted to refer to educators rather than 'learners' as indicated the existing PRO-SDLS model. In the adjusted model, 'Self-development: Preparedness to implement' also replaced 'The Characteristics of the Teaching-Learning Transaction'. Refer to Figure 1.2 and 2.1(a) and (b). The Lesotho nurse and midwifery educators' self-direction in learning were described according to their locus of control, initiative, self-efficacy and motivation, by means of the adapted instrument tool PRO-SDLS (Stockdale & Brockett, 2011).

1.6 STUDY FRAMEWORK

The adopted and adapted PRO-model (Figure 1.2) was used in this study. In the adapted PRO-model, for one to understand the complexities of self-direction in adult learning, it is important to distinguish between self-direction as an instructional method (external factor) and educator self-direction as a personality characteristic (internal factor). In order to understand both, it is necessary to recognise the social context in which such activity transpires (Brockett & Hiemstra, 1991; Stockdale & Brockett, 2011: 162).

In the PRO-model, personal responsibility is the central concept and the point of departure for understanding self-direction in adult learning. Individuals takes responsibility for their thoughts and actions, choose the directions they will pursue, and

take control over how they respond to situations (Brockett & Hiemstra, 1991; Stockdale & Brockett, 2011: 163).

Self-direction in learning (the process orientation) describes an instructional process that involves planning, implementation and evaluation of learning and the characteristics of the preparedness for implementing self-directedness (indicated as the teaching and learning transaction in the original PRO-model). Importantly the focus is on factors external to the individual. Concepts that are related to external factors include, for example, a needs assessment and evaluation, learning resources and the roles and skills of the educator (Brockett & Hiemstra, 1991).

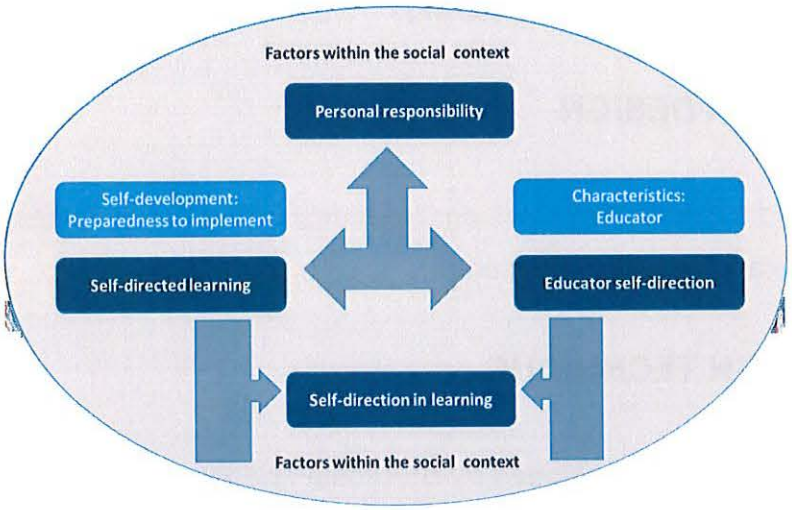


Figure 1.2 The PRO-model (Brockett & Hiemstra, 1991) **adopted and adapted by the researcher**

Nurse and midwifery educators' self-direction (the personal orientation), refers to factors internal to the individual or rather the personal characteristics of the educator. These characteristics influence the ability to take responsibility for one's own learning and their preparedness for self-development as an educator (Brockett & Hiemstra, 1991).

Self-direction in learning (the vital link) is the umbrella term that embraces both internal and external factors mentioned previously. According to Brockett and Hiemstra (1991),

there is a strong relationship between self-direction in learning and the educator's self-direction.

Teaching and learning transactions meant factors external to the individuals such as planning, implementing and evaluating learning. These should be congruent with personal expectations and if harmony is created success of the teaching and learning will possibly be achieved. Importantly, the final element of the PRO-model, namely, the social context (environment in which learning took place) cannot be ignored. Although individuals are central to the concept of self-direction in learning, ignoring the social context in which learning activities occur, will jeopardise a complete understanding of self-direction in learning

1.7 RESEARCH DESIGN

The study used a quantitative cross-sectional descriptive design to describe the SD of Lesotho nurse and midwifery educators.

1.8 RESEARCH TECHNIQUE

The original PRO-SDLS developed by Stockdale and Brockett (2011: 163) based on Brockett and Hiemstra's (1991). PRO-model, was adopted and adapted and was used to determine the self-direction in learning of nurse and midwifery educators. The questionnaire measured their locus of control, initiative, self-efficacy and motivation, within their social context (Stockdale & Brockett, 2011: 163). The questionnaire consisted of 30 statements that addressed the following two components and four factors:

- Professional development preparedness (calculated using the total of initiative and control factors)

- The Nurse and Midwifery educator's characteristic component (calculated using the total of self-efficacy and motivation).

The scores were interpreted as proposed by Stockdale and Brockett (2011: 163).

The original PRO-SDLS has been used in several studies with good results. The instrument was designed specifically for use in higher education instructional settings (Williams & Brown, 2013: 430). However, due to the change in focus from the learner to the educator, the validity and reliability of the original PRO-SDLS will be influenced (refer to section 1.12). The questionnaires were only available in English as all the educators use English as a teaching medium.

1.9 STUDY POPULATION

The population for the study included all the 75 nurse and midwifery educators at the six NTIs in Lesotho involved in the Diploma in General Nursing, the Diploma in Midwifery and the Bachelor of General Nursing and Midwifery in Lesotho. Table 1.1 shows the number of nurse and midwifery educators at NTIs in Lesotho. All the nurse and midwifery educators were invited to participate in the study.

Table 1.1 Details of study population

Nurses Training Institution	# Educators
NUL * Faculty of Health Sciences, Nursing Department	10
NHTC **	16
CHAL NTI *** Maluti Adventist College	10
CHAL NTI *** Roma College of Nursing	13
CHAL NTI *** Scott School of Nursing	15
CHAL NTI *** Paray School of Nursing	11
TOTAL	**75**

** BSc in General Nursing and Midwifery: Integrated Programme, ** National Health Training College (NHTC), ***Christian Health Association of Lesotho Nurses Training Institutions (CHAL NTI) (sic)*

1.10 PILOT STUDY

A pilot study was conducted prior to the main research. It was done on a small sample of respondents that have the same attributes as those selected for the main study. The aim of the pilot study was to determine whether the methodology, especially the measurement instruments, and analysis were relevant to the study (Brink, Van der Walt & Van Rensburg, 2012: 174; De Vos, Strydom, Fouche & Delport, 2011: 142; Du Plooy-Cilliers, Davis and Bezuidenhout, 2014: 257). The pilot study was necessary to ensure that the adapted PRO-SDLS instrument was suitable for the study. No changes were made to the questionnaire and therefore the data from the pilot study were included in the main study.

1.11 DATA COLLECTION

Ethics approval was obtained from the Ethics Committee of the Faculty of Health Sciences at the University of Free State (UFS). Thereafter permission to conduct the study was obtained from the Lesotho Ministry of Health. Letters of ethics approval and a copy of the study proposal were sent to the NTIs for final approval (Annexure B).

After the necessary approval was obtained, the researcher identified and trained a nurse educator (fieldworker) at each NTI to assist with the support of the respondents in completing the questionnaires. The fieldworker at each NTI was asked to hand over an information leaflet and an informed consent form to each prospective respondent, before data collection.

The fieldworker at each NTI was asked to arrange a venue and provide the respondents with the opportunity to complete the self-administered questionnaires, without discussing their responses, in pre-arranged sessions. The fieldworker was asked to collect the data under controlled circumstances and to ensure that all the questions were completed before submission. Completed questionnaires were stored

securely in a locked cabinet in the office of the fieldworker. The researcher received the completed questionnaires directly from the fieldworker.

1.12 VALIDITY AND RELIABILITY

Validity refers to the degree to which the instrument measures what it is supposed to measure. An instrument is only valid for the particular aim for which it has been designed (Bryman, 2012: 170; Du Plooy-Cilliers *et al.*, 2014: 256; Rossouw, 2005: 123).

Reliability denotes the consistency of measures obtained in the use of a particular instrument and indicates the extent of random error in the measurement method (Bryman, 2012: 168; Burns & Grove, 2009: 377; Du Plooy-Cilliers *et al.*, 2014: 254).

The following changes were made to the original PRO-SDLS:

- Referral to student's learning were changed to the educator's teaching and learning
- Professional development: preparedness to implement was changed to self-development: preparedness to implement
- Two statements on control and one on motivation was added to address the local social context applicable to the Lesotho educators
- Open ended questions were added to the questionnaire to obtain further clarification on the Lesotho context (These open-ended questions' data will not influence the calculations of the self-directedness in learning)

The adapted PRO-SDLS (Stockdale & Brockett, 2011: 163), were tested during the pilot study. Permission to use and adapt the instrument was obtained from Stockdale through electronic mail conversations.

1.13 ETHICAL CONSIDERATIONS

Ethics approval was obtained (ECUFS NR 196/2015 – Annexure A) from the Health Science Research Ethics Committee at the UFS, the Ethics Committee at the Lesotho Ministry of Health, Christian Health Association of Lesotho (CHAL) and each NTIs.

Each prospective respondent was provided with an information leaflet and an informed consent form (Annexures C and D). No vulnerable populations were used in the study.

The ethical considerations were observed by the researcher by ensuring that there were no foreseeable risks associated with the study. Respondents were informed that their participation was voluntary and that they were at liberty to withdraw from the study at any time without any consequences. The questionnaire took approximately 30 minutes to complete. No incentives were paid to respondents, nor were respondents charged to participate. Only the research team had access to the completed questionnaires. Anonymity was maintained because questionnaires were coded and the researcher was not able to associate data with specific respondents. The results will be submitted for publication or presented at conferences or in peer-reviewed accredited journals. The research report will be shared with the UFS, Lesotho Ministry of Health, Christian Health Association of Lesotho (CHAL) and the six NTIs upon completion of the study. After the data was extracted, completed questionnaires were locked in a cabinet for safety in the office of the researcher.

1.14 DATA ANALYSIS

Data were analysed by a biostatistician at the Department of Biostatistics, Faculty of Health Sciences, at the UFS. Numerical variables were summarised by means, standard deviations or medians and percentiles. Categorical variables were summarised by frequencies and percentages.

1.15 VALUE OF THE STUDY

The study is of value to respondents as the results provide information on self-direction in learning of nurse and midwifery educators at NTIs in Lesotho. The results can be used to indicate the preparedness of the educators to implement and maintain a competency-based curriculum.

The different NTIs, based on the results, can implement strategies to support the nurse and midwifery educators to develop the necessary skills to implement the specific curricula.

In general, health services can benefit when nurses who enter the healthcare settings, already exhibit high levels of self-direction in learning.

The study builds onto the body of knowledge regarding self-direction in learning and can possibly generate research questions for future research.

1.16 SUMMARY

In chapter 1, the concepts of self-direction and self-directed learning were explained together with numerous concepts, which were misinterpreted as either one or both. The history of self-direction and self-directed until to date has been traced. The background in terms of Lesotho as well as the global context were discussed. The problem statement was explained. In essence, the chapter gave an overview (foundation) of what to what could be expected in the subsequent chapters.

CHAPTER 2: LITERATURE REVIEW

Self-direction in learning is important for nurse educators and students alike. Sef-direction in learning is also regarded as a basis of all types of learning (Cazan & Schiopca, 2014: 640; Long & Agyekum, 1983). The literature review was mandatory to determine to what extent research studies have addressed the subject area of self-direction in learning. Gaps that were identified through these studies contributed to a refined aim, objective and research question related to the current study.

2.1 INTRODUCTION

Chapter one introduced the concept self-direction in earning as an umbrella term. Adult learning literature describe self-direction as a "misunderstood" concept. Therefore, the interchangeable use of numerous concepts related to self-direction in learning was highlighted. In the context of this study, educator self-direction and self-directed learning were synonymous.

In Chapter 2 the aim was to address issues related to educator self-direction and self-direction in learning. The background focused on the different perspectives of researchers on self-direction in learning, the development of SDL in adults, and the development of frameworks to facilitate an understanding of the concept. Concepts included in the PRO-model proposed by Brockett and Hiemstra (1991) guided the discussion. These concepts were personal responsibility, self-directed learning, educator self-direction, self-direction in learning and factors within the social context such as different institution where learning took place such as museum, or a library. The researcher included two aspects related to the educators namely, self-development related to preparedness to implement; and the educator characteristics.

2.2 VIEWS ON SELF-DIRECTION, SELF-DIRECTED LEARNING AND SELF-DIRECTION IN LEARNING

It is proclaimed by Song and Hill (2007: 27), that researchers tend to invest in research that focus on self-direction as an adult attribute, or the development of frameworks intended to facilitate an understanding of self-directed learning. These frameworks mainly focused on "process and personal attributes in face-to-face settings" (Song & Hill, 2007: 27). Self-direction as a process focuses on learner autonomy in the learning process, which centres on the following activities; assessment, planning, implementing and evaluating learning. In fact, reference was made to all factors external to the individual. The facilitator's role, skills and independent study are all elements related to the learning process of both facilitator and students. While SD as a personal attribute focuses on learner's capability in regulating the learning process (Brockett & Hiemstra, 1991; Song & Hill, 2007: 27; Stockdale & Brockett, 2011: 164).

Considering adult learning and self-direction in learning, Knowles and Associates (1984) contend that individuals are aware of their learning needs and are therefore masters of their own education. Managing their own education involves self-assessment, a process of reviewing their present performance. In doing so, they identify those areas where energy should be invested to improve their current performance and to reach their stated goals (Knowles & Associates, 1984: 70). Merriam, Caffarella and Baumgartner (2007: 25) acknowledged the importance of a society where people determine their learning.

Candy (1991, cited in Song and Hill, 2007: 27) addressed the importance of the learning context as a determinant of self-direction in learning. Whilst Song and Hill (2007: 27) stated that the lack of research into the operation of self-directed learning within a specific context, was noted by Merriam and Caffarella (1999, as cited in Song & Hill, 2007: 27; Stockdale and Brockett, 2011). Researchers recorded different levels

of self-directed learning related to learners, in both "familiar areas" or in "areas similar to a prior experience" (Song & Hill, 2007: 27).

2.3 SELF-DIRECTION AND SELF-DIRECTED LEARNING MODELS

Three important models namely, the Four-Dimensional Model (Candy 1991), Brockett and Hiemstra's (1991) PRO-model and Garrison's Three Dimensional Model (1997, cited in Song & Hill, 2007: 28–29), were selected by Song and Hill (2007: 28–29) as representations of SDL (refer to Table 2.1).

An overview of SD and SDL follows a discussion of the characteristics of each model and the concepts included in the PRO-model (Brockett & Hiemstra, 1991).

Table 2.1 Perspectives of SDL (Song & Hill, 2007: 28)

Name of Model	Four-Dimensional	PRO Model	Three-Dimensional
Author(s)	Candy	Brockett and Hiemstra	Garrison
Personal attribute: ***Manage morals, intellect and emotion***	Autonomy, Self-management	Goal orientation	Self-manage resources, Motivation
Process: ***Learner autonomy over instruction***	Learner control, Autodidaxy	Learner control	Self-monitoring
Context: ***Environment where learning takes place***	Self-direction is context bound	Social context, role of institutions and policies	Focuses on SDL in educational surrounding

2.3.1 Four-Dimensional Model, Candy (1991)

The concept SDL as an umbrella concept includes four dimensions (Candy, 1991). The four dimensions were personal autonomy, self-management, learner control and autodidaxy. Personal autonomy was ascribed to personal characteristics; Self-management refers to a person's contribution to facilitate personal learning; Learner-control addressed SD as a way of shaping instruction in strict settings; Autodidaxy describes a person's pursuit of learning in a more natural environment (Song & Hill,

2007: 29). A valuable contribution by Candy (1991) was the identification of the effect that "different content areas" might have on learners' SD.

2.3.2 Garrison, 1997 Three-Dimensional Model (cited by Several Authors)

Garrison's (1997) three-Dimensional Model (as cited in Pilling-Cormick, Burlington & Garrison, 2007: 16; Song & Hill, 2007: 29) do acknowledge SDL as both a personal attribute and a learning process. Garrison's model (1997 as cited in Shen, Chen & Hu, 2014: 2), however, described three dimensions to accomplish SDL. Interaction between self-management, self-monitoring and motivation seemed to be important characteristics of the three-Dimensional Model. Other aspects in Garrison's model (1997) (as cited in Botha, Coetzee & Coetzee, 2015: 65) included the use of resources, learning strategies and motivation to learn. In the educational setting, the model considered both observable and underlying motivation, beliefs and attitudes that drove adult learners' behaviour (Botha *et al.*, 2015: 65).

Importantly, although self-management meant taking control of the learning environment to reach stated objectives, Garrison's (1997 as cited in O'Shea, 2003: 65) stated that instead of independence, learner control relied on collaboration between the educator and the student. Both parties should have a common understanding of the concept of SD. A limitation of the three-Dimensional Model was the weak link between context and SDL (Song & Hill, 2007: 29).

The model was used to guide the study because it considered SDL as a personal attribute meaning the learner was responsible for regulating his/her learning. As well as recognizing the fact that both the educator and the learner must have a common understanding on the concept of SDL.

2.3.3 A conceptual framework towards understanding self-direction in adult learning, Brockett and Hiemstra (1991)

To understand self-direction in adult learning, Brockett and Hiemstra (1991) developed a conceptual framework (refer to Figure 2.1(a)). Two interrelated dimensions, namely, self-direction as an instructional process and personality characteristic formed the basis of the framework (Brockett & Hiemstra, 1991; Song & Hill, 2007: 29). According to Tough (1971, as cited in Brockett and Hiemstra, 1991), the publication of: "The Adult's Learning Projects" ignited research in the field of adult education. Thereafter, attention was mainly paid to SDL in adults, external degree programmes, and computer and video technologies.

In an attempt to clarify the concept, Brockett and Hiemstra (1991) stated, "self-direction in learning is a way of life". Through a concept analysis of the different ways in which SD was described and used in relationship with related concepts, Brockett and Hiemstra (1991) proposed their own definition of SD in adult learning. A conceptual framework flowed from the mentioned analysis. This framework made a distinction between self-directed learning as "an instructional method and learner self-direction as a personality characteristic" (Brockett & Hiemstra, 1991).

A discussion on self-direction in adult learning facilitated an understanding of the proposed conceptual framework. The discussion addressed self-direction as a misunderstood concept, an early view of self-education or a lifelong learning perspective. Furthermore, the discussion included SDL and schooling; the learning process and evolving perspective; instructional method or personality characteristic; and self-direction in adult learning as an umbrella concept. Eventually the discussion focused on the PRO-model: a framework for understanding adult learning (refer to Figure 2.1).

2.3.3.1 Self-direction as a misunderstood concept

An understanding of the concept "SD" is jeopardised by the many related concepts used interchangeably or in a similar context. These related concepts include synonyms such as, self-directed, self-planned, autonomous learning, self-teaching, independent study, and distance education (Brockett & Hiemstra, 1991; Dehnad Afsharian, Hosseini, Arabshahi & Bigdeli, 2014: 5185; Montin & Koivisto, 2014: 1; Zhang *et al.*, 2012: 570). Contributing to the complexity of self-direction in learning is the fact that "these terms offered varied, and often subtly different, emphases" (Brockett & Hiemstra, 1991). The same authors describe the following views on SD in an effort to explain the differences:

- **An early view of self-education**

An early view of self-education refers to a popular opinion that self-education is distinguished from other types of education only by the way it is acquired, for example, without a teacher or oral instruction. A lifelong learning perspective describes learning as not confined to adult educators, but to learning as a lifelong event. One of the views on SDL and schooling by Gibbons and Phillips (1982, as cited in Brockett & Hiemstra, 1991), supports the notion of lifelong learning, and also learning that takes place when people are not obligated to learn or compelled to teach others.

- **A learning process and evolving perspective**

The learning process refers to SD related to adulthood. A description of SD in adult learning, considers certain phases in which learner control is vital (Brockett & Hiemstra, 1991). Though's, (1979 as cited in Brockett & Hiemstra, 1991) concept of "self-planned" learning, Moore's, (1980 cited in Brockett & Hiemstra, 1991) related concepts of "autonomous learner", and Knowles's (1975 as cited in Brockett & Hiemstra, 1991) view of SD as a process driven by individuals' initiative, support SD as a process.

- **An evolving perspective**

The evolving perspective, the cornerstone in defining SDL, supports the notion that individuals' understanding and views on SDL change over time. This is evident when Brookfield's, (1980 as cited in Brockett & Hiemstra, 1991) term independent adult learning, changed to SDL, in an effort to recognise the fact that "learning" and "education" differs. Brookfield, (1988 as cited in Brockett & Hiemstra, 1991) opted to address learning as a "complex phenomenon" opposed to SDL due to the ambiguous nature of the latter concept.

2.3.3.2 Instructional method or personality characteristic

Self-direction in adult learning is either an instructional method or personality characteristic. The latter attest to the importance of the learner assuming personal responsibility for his/her thoughts and actions (Brockett & Hiemstra, 1991).

2.3.3.3 Self-direction as an umbrella concept

Considering the subtle changes in the concept SDL, Brockett and Hiemstra (1991) proposed SD as an alternative concept. These authors suggested that self-direction in learning as an umbrella concept, provides the scope to understand factors external and internal to the learner. The external factors facilitate the learner in taking primary responsibility for learning which includes; planning, implementing and evaluating learning while internal factors or rather personality characteristics are factors which predisposes one to accept responsibility for his thoughts and actions in learning (Brockett & Hiemstra, 1991).

The discussion below will focus on the PRO-model developed by Brockett and Hiemstra (1991) and the adjustments to the model previously stated by the researcher. Refer to Figures 1.2 Chapter 1 and 2.1 below.

2.3.3.4 The PRO-model: a framework for understanding adult learning

Personal responsibility is central to an understanding of SD in adult learning. When used as a point of departure, personal responsibility refers to individuals taking "ownership for their own thoughts and actions" (Brockett & Hiemstra, 1991). Personal responsibility in this context does not relate to control over personal circumstances or the settings in which individuals find themselves. It mainly relates to individuals' control on how they choose to respond to given situations (Brockett & Hiemstra, 1991). Individuals could choose to accept the current situation or to act in such a way that change is evident. The decision to act is an individuals' drive to take control of their learning and is an important characteristic that determined their potential for SD.

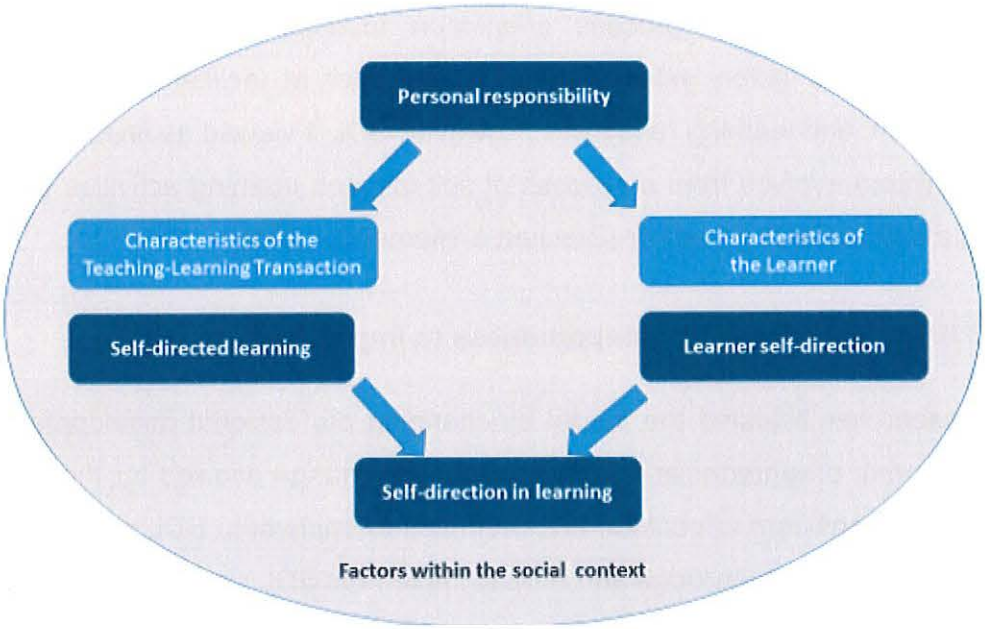


Figure 2.1The PRO Model (Brockett & Hiemstra, 1991)

Brockett and Hiemstra (1991) based the inclusion of personal responsibility in their PRO-model on the humanistic philosophical assumptions and Chene's (1983 as cited in Brockett & Hiemstra, 1991) idea of autonomy. The same authors, for example, support the view that inherently human nature is good, and that individuals possess an extensive ability to grow. They also acknowledge the view that individuals set their own rules and choose norms they intend to respect.

2.3.3.5 Self-directed learning: The process orientation

SDL is either a process or a learning outcome. As a process, SDL distinguishes between learning in formal instructional settings and learning in natural contexts. SDL as an outcome could be broken down into psychological and philosophical characteristics of people (Cadorin, Rei, Dante, Bulfone, Viera & Palese, 2015: 746; Candy, 1991: 6). The process orientation focused on teaching and learning transactions and factors external to the learner such as facilitator roles, skills, needs assessment, and learning resources. However, SDL if viewed as finite behaviour or a belief system evolves from a process of self-initiated learning activities or a state of being a self-actualized learner (Brockett & Hiemstra, 1991).

2.3.3.6 Self-development: preparedness to implement

The researcher adjusted the model by changing professional development to "self-development: preparedness to implement". The change allowed for the fact that the researcher considers educators' preparedness to implement SDL as vital. Educators with the necessary knowledge and skills to implement SDL strategies, which translated to high level of SDL, might be in a better position to support students in their personal quest to become self-directed, lifelong learners. Ultimately, SDL requires both educator and learner to be adequately prepared. A balance between the educators and learners' self-direction in learning is necessary. Educators should not ignore learners' preferences and approaches to learning (Ali & Sebai, 2010: 193).

2.3.3.7 Educator self-direction

Educators must have a clear understanding of the concept of SDL and the skills inherent to its development. SDL depends on personal attributes such as facilitating learning rather than disseminating knowledge (Abraham *et al.*, 2011: 393). Most educators view professional autonomy as a cornerstone of SDL (Ali & Sebai, 2010: 189; Murad *et al.*, 2010: 1058; Stickles, n.d: 39).

2.3.3.8 Educators' characteristics

The responsibility of the nurse educator is to build a harmonious team relationship in an effort to facilitate effective SDL. Assessing students' learning styles and readiness prior to introducing a SDL approach, could reduce student anxiety and/or frustration (Cadorin *et al.*, 2015: 372; O'Shea, 2003: 68; Yuan *et al.*, 2012: 428).

The educator when guiding them from dependence to independence should consider students' individual learning needs (Ali & Sebai, 2010: 189; Williamson, 2007: 67). Facilitating students to become independent aligns with evidence that mature students are usually more self-directed than junior students are, and that SDL is a maturational process (Yuan, Williams & Fang, 2012: 428).

2.3.3.9 Self-direction in learning

It must be acknowledged that there is haphazard nomenclature around the concept of SD, which distorted the definition of SD. SD has been referred to as; self-teaching, self-planned learning, independent adult learning, SDL, and self-initiated learning (Ross, 2002).

Self-direction in learning, as a personal attribute, refers to a process in which people take primary responsibility or rather initiative in selecting and shaping their learning experiences. SD is viewed as both instructional method (SDL), and a personality

characteristic of the learner (learner SD). Both components contribute to the outcome of self-direction in learning (Stockdale & Brockett, 2011: 162).

2.3.3.10 Factors within the social context

SDL does not occur in splendid isolation of the world in which the learner lives. What people intend to learn is to a large extend influenced by the nature of the society. Self-directed adults respond to the diversified needs of their communities, by engaging in life-long learning and making SDL their motto (Merriam & Bierema, 2014: 1; Merriam *et al.*, 2007: 5).

2.4 SELF-DIRECTION AND SELF-DIRECTED LEARNING

In learning, SD is a way of life, despite the fact that educators act contrary to the idea by misusing and misunderstanding their roles, due to confusion around the concept of SD (Brockett & Hiemstra, 1991). As an umbrella concept, SD encompasses external factors that contribute to the ability of an individual to take responsibility for planning; implementing and evaluating their own learning. Internal factors or personality characteristics predisposes a person towards accepting responsibility for thoughts, and actions (Brockett & Hiemstra, 1991). Although all individuals are capable of developing self-direction in learning, aspects such as learning motivation, self-efficacy, self-esteem, conscientiousness, openness to experience, even intelligence will differ (Long, 2000, as cited in Cazan & Schiopca, 2013: 640).

Related concepts with SDL are independent learning, distance learning and psychological control (Long, n.d.). Some of these concepts are used synonymously with SD. SDL is even regarded as an integral component of problem-based learning and its objectives (Long, n.d;). A framework was developed to clarify the concept.

SDL begins with the premise that individuals are aware of the need for learning and are masters of their own learning. It involves self-assessment, firstly reviewing present

performance then determining where best to invest energy in improving current performance and meeting future goals (Knowles & Associates, 1984: 70). A self-directed person controls both the learning objectives and the means to achieve them (Brockett & Hiemstra, 1991).

2.4.1 Definitions related to self-direction and self-directed learning

SDL as an overarching concept consists of four dimensions. These dimensions include SD as a personal attribute, SD as a process or form of study, SD as the willingness and capacity to conduct one's own education and SD as the individual, non-institutional pursuit of learning opportunities in natural societal settings (Song & Hill, 2007: 29).

The context in which learning takes place influence SD as a personal attribute or rather personal autonomy (Song & Hill, 2007: 29). SDL as a process means that individuals take the initiative, with or without the help of others, to identify their learning needs. They also formulate their learning goals, identify human and material learning resources, and implement appropriate learning strategies, and evaluate learning outcomes through critical reflection (Cadorin *et al.*, 2015: 746; Knowles & Associates, 1984: 301; Merriam & Bierema, 2014: 63; Rezaee & Mosalanejad, 2015: 297; Yang & Jiang, 2014: 256).

SDL include self-planned learning, inquiry method, independent learning, self-education, self-instruction, self-study and autonomous learning. The difference between the mentioned concepts and SDL is that these concepts imply that learning happens in isolation, whereas SDL takes place in association with helpers such as facilitators, resource people, instructors, tutors, and peers (Knowles & Associates, 1984: 301).

Self-planned learning is a learning activity that is self-directed, self-initiated and mostly done alone (Brockett & Hiemstra, 1991). As an inquiry method the learner must be

self-directed, demonstrate critical thinking to solve problems, independence and motivation through SDL (Mishra, Fahnoe & Henriksen, 2013: 11).

Independent learning is closely linked to SDL and contributes to the confusion or uncertainty caused by the interchangeable use of the mentioned concepts and SDL (Montin & Koivisto, 2014: 1). Independent learning connotes learning in isolation or learning in which the learner maintains independence. Assistance, although sometimes welcomed, remains subjected to evaluation by the learner (Davis, 2015: 26; Kocaman, Dicle & Ugur, 2009: 286; Long, n.d.; Mulube & Jooste, 2014: 1777; Tao, Li, Xu & Jiang, 2015: 1119).

Self-education or self-instruction means acquirements made without a teacher or oral instruction (Brockett & Hiemstra, 1991). In self-education or instruction, the learner assumes the primary role in planning, implementing and evaluating learning experiences (Brockett & Hiemstra, 1991). Over and above, individuals take control of the dynamics and techniques to educate themselves on particular subjects (Cadorin *et al.*, 2013: 1511).

Autonomy has a personal and situational dimension. Researchers have assumed personal autonomy to be a generalised personal attribute that manifests itself in all situations (Candy, 1991: 412).

2.4.2 Types of self-direction

SDL includes two types. Firstly, SDL for achieving subject goals, whereby teaching is focused on students' overcoming teacher-centred education as well as emphasizing students' autonomy (Shin, 2012: 37). Secondly, SDL for enhancing SDL competence which is based on personal autonomy. SDL requires students to choose their subject matter in line with their own learning goals.

2.4.3 Development of self-direction in learning

Self-direction in learning started with nurse educators being developed as self-directed learners, and then acted as role models and prepare their students to be self-directed as well (Van Rensburg & Botma, 2015: 2). An interest in a specific field seemed to be linked to a high level of SDL, opposed to a lack of interest where a person exhibits lower levels thereof. A person exhibiting a high level of self-direction in learning would like to know more by gathering relevant information, exploring further and showing intrinsic motivation, which add to confidence (Song & Hill, 2007: 27; Van Rensburg & Botma, 2015: 2–3).

Nurse educators who aim to promote self-direction in student learning should strive to establish a supportive climate to promote an individual's awareness of the self as a self-directed learner; create in-transition structures; provide support systems' using both innovative and generative learning approaches to stimulate creative and critical thinking. Furthermore, nurse educators should introduce problem based learning; encourage visualization, reflection and thoughtful evaluation followed by new question formation. Assessment strategies used should build on self-direction; celebrate progress and success, identifying new learning needs and interests (Song & Hill, 2007: 27; Van Rensburg & Botma, 2015: 2–3).

For self-direction in learning to be successful, individuals should employ a constructivist approach, meaning that they should construct their own knowledge and divorce themselves from being passive recipient of knowledge. Over and above constructivism focused on practical application over theory (deVallejos, et al., 2017, 3; Karameta, n.d., 329). The Educators' role would be support to the learner in their journey of self-directedness. Management of time and resources was crucial in enhancing SD, especially because there was need for collaboration for both the educator and the learner (Candy, 1991: 420; Van Rensburg & Botma, 2015: 3).

There is a shared sentiment that SDL is a maturational process, the more mature one becomes the more self-directedness becomes evident (Yuan, et al., 2012, 427). Over and above, educators' self-directedness happens on a continuum meaning readiness for SDL depends on maturation and experience in the particular field. Nurse educators should assess learners' readiness before introducing SDL (Knowles & Associates, 1984; Merriam *et al.*, 2007: 106; Montin & Koivisto, 2014: 1; Yuan *et al.*, 2012: 427).

2.4.4 Factors supporting self-directed learning

A combination of factors such as preparation of the teacher, learning environment design, access to technology as well the students' ownership and independence, supports SDL. If these factors are present, students might be more prone to make meaningful self-directed choices, and to explore their interests and passion (Mishra *et al.*, 2013: 12). Educators need to understand that they are architects and designers of learning environments that allow students to develop mental discipline required to think outside of the disciplines (Mishra *et al.*, 2013: 12).

Goals related to SDL include enhancing the ability of adult learners to be self-directed, to foster transformational learning as central to SDL, and to promote emancipatory learning and social action as an integral part of SDL (Merriam *et al.*, 2007: 107). One of the goals alludes to learning as a conceived set of personal attributes and specific skills. This goal could be fulfilled when self-directed educators help learners to plan, relocate resources and master alternative learning strategies. The goal therefore, is about personal growth of the individual in the learning field.

Nurse educators in their journey of SD do nurture students' SD and personal efficacy by affording students opportunities before, during and after instruction. The educators will exercise some control over learning, but mostly engage students in strategies that offer them opportunity to make informed decisions. Another school of thought indicates that when students have set their own goals they tend to work harder to achieve them compared to when their educators set the goals for them (Howard & Tighe, n.d.).

2.4.5 Competencies and self-direction in learning

Healthcare professionals should be competent practitioners and demonstrate that they have the necessary knowledge, skills, attitudes or values. Furthermore, healthcare professionals should demonstrate clinical reasoning, reflective practice skills, and should maintain currency in practice (Davis, 2015: 26; Gruppen, Mangrulkar & Kolars, 2014). In nursing, competencies should be maintained through continuous learning or continuous professional development (Davis, 2015: 26).

Recently, Lesotho shifted from content-driven to competency-based education in an effort to improve quality of healthcare services through the support of NEPI (Botma, 2014: 23). Competencies needed by educators to facilitate a competency-based curriculum include an ability to:

- Create a learning environment that is conducive for learning. Such an environment must be collaborative not competitive and is characterised by mutual caring, support and intellectual rigour.
- Facilitate group decision-making.
- Diagnose learning needs or rather have the ability to help learners to diagnose their own learning needs.
- Assist learners to set their own learning goals or learning objectives, which should be clear, realistic and achievable.

Considering the pivotal role nurse educators play to incorporate these strategies in theoretical and clinical teaching, aggressive encouragement of educators to be actively involved in SDL, is needed. To achieve this, educators should attend regular refresher courses to enlighten them, to discourage the use of outdated ways of teaching, and to help them to embrace innovative teaching strategies (Achuonye, 2015: 2096).

The lecture method is still prevalent in schools. Unfortunately, ignorance prevents educators from engaging in innovative teaching strategies such as interactive, team

focused, experiential learning, learning contracts, personal support and reflective meetings (Achuonye, 2015: 2096; Cadorin *et al.*, 2015: 746; Tao *et al.*, 2015: 1120;).

One should however bear in mind that no single method is best for all subjects hence the blended learning. It has been realized that problem based learning (PBL) is best learned when integrated in a domain. Evidence from higher education suggests that self-directedness is an important trait for students especially if PBL is used as an approach (Williams & Brown, 2013: 430). The SDL requires a student centred curriculum such as PBL and lifelong autonomous learners (Fengning, 2012).

In Lesotho, the NTIs are currently implementing different curricula, the reason being a transformative move from content to competency-based education. Since it is a huge move forward, it calls for resources to be in place. The Government of Lesotho through the aid of the US Government, managed to prepare educators for such move, by exposing them to different capacity building training to build the local capacity and to leave a legacy for the Country.

2.4.6 Positive outcomes or advantages related to self-direction

SD in individuals features as moderate improvement in knowledge, and improvement of the affective and psychomotor domains, thus resulting in skills retention and in assisting nurses to face emerging challenges in healthcare.

Other advantages include increased choices regarding what to learn and how to learn, persistence in achieving goals set, independence in learning and decision-making. Advantages also include self-disciplined in adhering to goals set, confidence in own ability to achieve intended goals, and autonomy in the learning process. The process focuses on assessment, planning, implementing and evaluating learning. as well as motivation, skills for development of lifelong learning, and interpersonal communication (Cadorin *et al.*, 2015: 747; Davis, 2015: 27; Yuan *et al.*, 2012: 427; Zhang *et al.*, 2012: 570). Students may use the SDL skills in different situations such

as when faced with a complex and demanding clinical situation (Cadorin *et al.*, 2015: 747).

2.4.7 Self-directed learning in an online environment

Online learning is closely associated with SDL from the process and the personal attribute perspective (Song & Hill, 2007: 36).

Open distance learning is characterized by physical separation of the educator and the learner, through instruction delivered using media such as information communicated through technologies and blended materials (Coetzee, 2014: 1086). Open distance learning requires an individual with a high level of SDL.

It has been realised that SDL is critical for learners who are involved in online learning, such that learners need to have high level of SDL if they want to succeed in the online environment (Song & Hill, 2007: 30).

According to studies done on the relationship between the online learning context and SDL, attributes of SDL such as self-efficacy were related to achievement of learners in an online environment (Song & Hill, 2007: 36).

2.4.8 Assessment of Self-directed Learning

SDL has received increasing attention especially in higher education. it is associated with the following; increased curiosity, critical thinking, quality of understanding, retention and recall, better decision making, achievement satisfaction, motivation, competence and confidence (Shen *et al.*, 2014: 1).

SDL is usually measured using reliable and valid instruments. There are various Chinese versions of the instruments developed such as the following; Guglielmino's (1977); Fisher, King, and Tague (2001) and Williamson (2007 as cited in Su-Fen, Lee-

Hsieh, Turton & Kuan-Chia, 2014: 91). All the above instruments used Delphi studies, exploratory factor analysis to establish content and construct validity and reliability.

However, all the above instruments were at some point revised, such as the following; Fisher and King (2010) contained 29 items in three domains as; self-management, desire for learning, and self-control, while Cheng, Kuo, Lin & Lee-Hsieh (2010) included 20 items in four domains as; learning motivation, planning and implementing, self-monitoring, and interpersonal communication.

Instruments were evaluated to ensure validity and reliability in measuring the variables under study. A reliable and valid instrument could improve nurse educators to understanding learner SDL, and their readiness for SDL. This will also help to assist in giving guidance in learning difficulty as well as providing a reference of SDL status for the next decade (Su-Fen *et al.*, 2014: 90).

Three examples of instruments measuring SDL are Guglielmino's (1977 as cited in Cheng *et al.*, 2010: 1153), SDL readiness scale (SDLRS), Fisher, King & Tague, (2001) SDL readiness scale and Williamson's (2007) self-rating scale of SDL. Guglielmino (1977 as cited in Cheng *et al.*, 2010: 1153) defined eight components or factors of SDL as follows; openness to learning opportunities, self-concept as an effective learner, initiatives, independence, love for learning, creativity, positive orientation to the future and problem solving skills (Cheng *et al.*, 2010: 1153; Klunklin, Viseskul & Sripusanapan, 2010: 177). Guglielmino SDLRS was critiqued in relation to construct validity and reliability (Fisher *et al.*, 2001: 519).

The instrument developed by Fisher *et al.* (2001) consisted of 3 components or factors of SDL thus; self-management, desire for learning, and self-control. Later, four factors were discovered of which two of them, self-determination and effective organization of learning correspond with self-control and self-management. The remaining factors; critical evaluation and learning and self-efficacy do not correspond with those reported by Fisher and co-workers (Cheng *et al.*, 2010: 1153; Hendry & Ginns, 2009: 919).

Brockett and Hiemstra (1991) proposed the SDL readiness scale (SDLRS) as an alternative to the above mentioned assessment instruments.

The validation of the SDL readiness scale (SDLRS) was done in three stages namely, the development of 93 items following a comprehensive literature review, and a Delphi consensus technique including an expert panel of 11 nurse academics and nurse educators to determine whether the 93 items reflected the characteristics required for SDL. The final scale consisted of 40 items distributed across three factors as; self-management, desire for learning and self-control. The scale has been recommended for higher education institutions (Fisher & King, 2010: 44).

2.5 SUMMARY

The researcher highlighted the confusion that exists in literature around SDL by firstly defining the concept of SDL as an umbrella and misunderstood concept. The Personal Responsibility Orientation model by Brockett and Hiemstra (1991), the Three Dimensional model by Garrison (1997) and the Four Dimensional model by Candy (1991) were discussed. However, amongst the SDL models, the model proposed by Brockett and Hiemstra (1991) was selected because of its emphasis on personal responsibility, which referred to an individual taking ownership for their own thoughts and actions.

CHAPTER 3: RESEARCH METHODOLOGY

Chapter three addresses the methods and procedures used to answer the research question, which is about the extent to which nurse and midwifery educators in Lesotho have self-direction in learning. The research design and technique are stated and the selection thereof justified. The discussion furthermore refers to the study population, the pilot study conducted in a small NTI, the principles of data collection, validity and reliability. To conclude, the ethical principles, application of these principles, data analysis, value, and limitations of the study, are mentioned.

The following concepts were used interchangeably; self-direction (SD) and self-directed learning (SDL). Nurse-midwifery educators, nurse educators and educators.

3.1 RESEARCH QUESTION, AIM AND OBJECTIVES

The research question is a means by which the researcher narrows down the focus of the study in relation to the problem statement. A good research question adds value to the research study (Du Plooy-Cilliers *et al.*, 2014: 68; Lapan & Quartaroli, 2009: 206; Moule & Goodman, 2009: 74; Polit & Beck, 2004: 65). The research question was, "To what extent do nurse and midwifery educators in Lesotho have self-direction in learning?"

The aim is a specific, brief and concrete focus of what the researcher aimed to achieve with the study. This study provided a once off cross-sectional description of whether Lesotho nurse and midwifery educators have self-direction in learning (Botma, Greeff, Mulaudzi & Wright, 2010:94; De Vos, Strydom, Fouche & Delport, 2011: 94; TerreBlanche, Durrheim & Painter, 2014: 84).

The research objective entails a declarative statement to obtain answers to the research question (Botma *et al.*, 2010: 94; Brink *et al.*, 2012: 85; Du Plooy-Cilliers *et al.*, 2014: 98).

The objective was to describe the Lesotho nurse and midwifery educators' self-direction in learning. Self-direction in learning was described according to the educators' locus of control, initiative, self-efficacy and motivation, within their social context by means of the adapted PRO model.

3.2 RESEARCH DESIGN

A research design is a strategic framework for action and serves as a bridge between the research question and the execution of the research. It involves justification for the technical series of decisions taken related to, among others, the context of the research and the research technique employed to collect and analyse data (Burns & Grove, 2009: 218; De Vos *et al.*, 2011: 142; TerreBlanche *et al.*, 2014: 34).

Quantitative research includes four types namely, descriptive, correlational, quasi-experimental and experimental (Burns & Grove, 2009: 45). In a descriptive study, there is knowledge generation and theories built. Application of such knowledge in practice then becomes important. Furthermore, to find out if the existing general theories are supported by specific situation (Brink *et al.*, 2012: 112; Goddard & Melville, 2012: 9).

This study used a quantitative cross-section descriptive design. A quantitative design allows the researcher to collect objective numerical data about each respondents' locus of control, initiative, self-efficacy and motivation, within their social context (Bell, Hirschsohn, dos Santos, du Toit, Masenge, van Aardt & Wagner, 2014: 31; McMillan & Schumacher, 2010: 9).

A cross-sectional research design refers to the collection of data at one point in time from multiple respondents. In contrast to a longitudinal study, cross-sectional studies produce a large amount of accessible data in a short period. Cross-sectional studies are therefore time and cost effective. It can however not document change over time (Babbie, 2007: 102; Bell, 2014: 106; Brink *et al.*, 2012: 101; Bryman, 2012: 59).

Advantages of using a cross-sectional design in this study were that there were no threat with regard to maturation, that is, change in respondents over time or attrition of respondents due to a once-off data collection process.

This study used a descriptive design as little is known about the SD and SDL of nurse and midwifery educators' in Lesotho. This new knowledge could contribute and be linked to existing theories, practice and literature (Botma *et al.*, 2010: 110; Brink *et al.*, 2012: 112; Goddard & Melville, 2012: 9). A self-administered questionnaire enabled data collection. The researcher could remain objective and avoid influencing the respondents' answers. The nature of the design which was quantitative, could be replicated. The reason for such replication, was because it used standardised fixed procedures. Whilst qualitative was determined by the richness of the information (De Vos *et al.*, 2011: 66).

3.3 RESEARCH METHODS

Research techniques such as questionnaires, checklists, structured observations and structured interviews are available. The researcher used a self-administered questionnaire, which was a quantitative data-collecting tool, to obtain facts and opinions about the phenomenon in question, thus allowing respondents time to complete the questionnaire in a relaxed environment and without being intimidated (De Vos *et al.*, 2011: 188).

A disadvantage related to the questionnaire as a technique, is the limited involvement of the researcher. Hence, misunderstood questions could not be answered (De Vos *et al.*, 2011: 188). However, the researcher managed the limitation by availing herself through telephone and email contact for more clarifications. Over and above an identified nurse educator or fieldworker was made available for further support.

The original PRO-SDLS questionnaire to measure SD was adapted for the study. The PRO-SDLS developed by Stockdale and Brockett (2011: 163) was based on a model

developed earlier by Brockett and Hiemstra (1991). The model was originally used to illustrate the relationships between concepts of SD for students in Higher Education. In this study the subjects assessed in the questionnaire on SD, were educators and not students or learners.

The original PRO-SDLS questionnaire was adapted by replacing the words "students' learning" to "educators' teaching and learning", the instrument measured both teaching and learning. To contextualise the questionnaire for Lesotho two statements namely, one on control and one on motivation, were added together with open-ended questions at the end of the questionnaire.

The questionnaire measured the subjects' locus of control, initiative, self-efficacy and motivation within the social context in which they occur such as the environment they find themselves in, e.g. classroom. The questionnaire consisted of 8 questions addressing demographic data, 30 statements related to teaching and learning, and 3 open-ended questions about context. The 30 statements addressed two components and four factors:

- Self-development preparedness: Calculated as the sum of initiative and control factors, and
- The nurse and midwifery educators' characteristic component: Calculated as the sum of self-efficacy and motivation factors.

Educators scored each of the 30 statements. The scores ranged from strongly disagree to strongly agree as proposed by Stockdale and Brockett (2011: 163). The self-administered technique allowed the researcher to collect data from several respondents at different NTIs in a short period without the need to be present (cf. Bell *et al.*, 2014: 192; Brink *et al.*, 2012: 153). Respondents could complete the questionnaires at a time suitable for the group and provided relevant answers by checking the trend in responses to various questions.

3.4 STUDY POPULATION

A study population is the entire group of people with the characteristics and composition that meets the aims and objectives of a study (Brink *et al.*, 2012: 131; Goddard & Melville, 2012: 34; Polit & Beck, 2012: 273). The population for this study was seventy-five (75) nurse and midwifery educators teaching in either the Diploma in General Nursing, the Diploma in Midwifery or the Bachelor of General Nursing and Midwifery. The population was recruited from the following institutions; NUL, NHTC, as well as CHAL institutions namely, Maluti Adventist College, Roma College of Nursing, Scott School of Nursing and Paray School of Nursing. The nurse and midwifery educators held qualifications that ranged from a Baccalaureate degree in Nursing to a Doctorate in Nursing.

No sampling was done for the study, meaning all nurse and midwifery educators in the six (6) NTIs involved in the above-mentioned programmes were eligible to participate. The respondents had at least a Baccalaureate degree and were proficient in English.

3.5 PRETESTING OF THE INSTRUMENT

A pilot test was conducted to assess the appropriateness of the questionnaire prior to the main study. Respondents that met the study criteria completed the questionnaire (Botma *et al.*, 2010: 275; De Vos *et al.*, 2011: 237). The pilot study included nine (9) nurse and midwifery educators at one of the smaller NTIs identified for the study. The same procedures described under data collection (3.6) in the main study were used to conduct the pilot study.

The aim of the pilot study was to ensure that educators understood all the questions, and to check ambiguity and misinterpretation of questions that could influence reliability and validated of collected data. A nurse educator or fieldworker from each NTI was available to manage enquiries by respondents. The researcher's contact

information was made available in case clarification by the fieldworker was needed. The data from the questionnaires were coded and captured and available as an electronic version. There were no changes to the questionnaire; therefore, the data from the pilot study were included in the main study.

3.6 DATA COLLECTION

Data collection involves the gathering of information to answer a research question based on standardised procedures (Creswell & Clark, 2007: 112; Mertens, 2015: 416; Polit & Beck, 2012: 725). Data collection for the main study commenced after the pilot study. The procedure for data collection was the same for each of the NTIs.

1. The researcher identified and trained a nurse educator or fieldworker at each NTIs to supervise and support respondents during the data collection process.

2. The fieldworker at each NTI received sealed envelopes containing copies of the information leaflets, consent forms and questionnaires.

3. The fieldworker arranged a venue and invited the respondents to participate.

4. The fieldworker provided each respondent with the information leaflet and a consent form. The fieldworker handed a sealed envelope, containing the questionnaire, to respondents, that agreed to participate. Respondents then simultaneously completed the questionnaire.

5. Respondents completed the self-administered questionnaire but were allowed to seek clarifications on questions from the fieldworker,

6. On completion, the fieldworker checked each questionnaire for completeness and placed it in a sealable envelope. The sealed envelope containing all the questionnaires was locked in a cabinet in the fieldworker's office. Completed consent forms and questionnaires were kept separately.

7. The fieldworker handed the questionnaires to the researcher on an agreed time.

3.7 VALIDITY AND RELIABILITY

The terms reliability and validity are mostly used in quantitative research. In quantitative research, the aim is to use applicable research methods in order to obtain measureable, numerical and statistical results (Du Plooy-Cilliers *et al.*, 2014: 253).

Validity refers to the degree to which the research conclusions and findings are sound and true by ensuring that the data collection tool measures what it intends to measure (Du Plooy-Cilliers *et al.*, 2014: 256; McMillan & Schumacher, 2010: 104 Moule & Goodman, 2009: 184; Polit & Beck, 2012: 175; TerreBlanche, *et al.*, 2014: 90). The types of validity applicable to the study:

Content validity: Involves checking the relevance of the questionnaire and representativeness of all the components or dimensions of the variables (Brink *et al.*, 2012: 166; Du Plooy-Cilliers *et al.*, 2014: 256). The current study aimed to measure self-directedness of nurse educators. In the context of the study, content validity was unthreatened, as the components of the variables measured in the questionnaire were not changed (Stockdale & Brockett, 2011: 163).

Face validity: The instrument or tool was reviewed by experts in a field to ensure that the questions measure the identified variable(s) (Brink *et al.*, 2012: 166; De Vos *et al.*, 2011: 173). For the purpose of the current study, experienced researchers and experts in the field of higher education formed part of an evaluation committee to confirm that the questionnaire measures what it was intended to measure. Based on the committees' feedback, "students' learning" changed to "educators' teaching and learning". Unlike with students where teaching do not apply, with educators teaching and learning do apply and have been found not easily separable because of the nature of the job. Educators as they teach they were also expected to learn. Their SDL were measured as they both engage in teaching and learning.

Reliability refers to consistency in the research method and measuring instrument and relates to the research findings. Reliability therefore means that if a different group of respondents completes the same instrument, at a different time, the results should be the same (Botma *et al.*, 2010: 177; Bryman, 2012: 169; Du Plooy-Cilliers *et al.*, 2014: 254; Lapan & Quartaroli, 2009: 62). Reliability is also described as the extent to which the results of a study can be "generalised and similar results obtained if the research was conducted again" (Du Plooy-Cilliers *et al.*, 2014: 254).

Reliability was observed, because the different respondents completed a similar questionnaire. No disparities were noted in responding to questions (Du Plooy-Cilliers *et al.*, 2014: 255). The researcher, co-code and verified by the supervisor, captured the data.

A threat to reliability in the main study could have been the misinterpretation of a question by the respondents (cf. Du Plooy-Cilliers *et al.*, 2014: 254). The following measures limited this thread:

- A pilot study was done;
- An information leaflet was provided;
- A nurse educator/fieldworker was available to support respondents;

The researcher was available telephonically to answer any questions the respondents had and the questionnaire was available in English, the official media of instruction for respondents.

No sampling was done for either the institutions or the population and the procedures of the study were carefully noted. The study therefore represents the entire population. Based on Bryman (2012: 59) and Du Plooy-Cilliers *et al.* (2014: 254), views, generalisation is another term used in relation to reliability. According to these authors, reliability is the extent to which research results can be generalised. However, repeating a study should provide similar results. The researcher considers the study

results related to SD of nurse educators as reliable and replicable in more or less the same context.

3.8 ETHICAL CONSIDERATIONS

Ethical principles of conducting research were observed carefully to protect all involved in line with reputable codes of ethics (Botma *et al.*, 2010: 56) in the following ways:

1. Permission to conduct the study was obtained from the; Ethics Committee Faculty of Health Sciences (ECUFS NR 196/2015), MoH Lesotho, CHAL and the six (6) NTI's (annexure A-D).

2. Beneficence, to maximise potential benefits of the study (De Vos *et al.*, 2011: 116) were upheld by:

    - Ensuring that the study contributed to social value by choosing a relevant topic as described in the introduction and problem statement. Refer to Chapter one.
    - Choosing a relevant study design. The researcher carefully adhered to guidelines of the selected design.

3. Justice, also known as fair treatment to all the participants (Van Wyk, 2011: 94), were ensured by the fact that:

    - Respondents were not members of a particularly vulnerable population and were competent to give informed consent (self-determination).
    - No sampling was done, therefore the population as stipulated in the study had the opportunity to participate if they so wished. Meaning each person had an equal chance to participate.
    - The respondents were aware that there is no compensation for participation nor will they incur any expenses.

4. Autonomy, as the right to make own decisions without being controlled (Van Wyk, 2011: 94), was ensured by:

    - Prospective respondents received an information leaflet and had the opportunity to read the document. Respondents could also opt to sign the consent form or to decline to participate. Refer to Annexure A.
    - Participation in the study was voluntary and the respondents could withdraw any time without penalty or loss of entitled benefits.
    - The aims, objectives and benefits of the study were included in the information leaflet given to respondents.

5. Non-maleficence was ensured (Van Wyk, 2011: 94). Respondents were not harmed as:

    - There were no foreseeable permanent risks associated with the study.
    - Fieldworkers were identified at each NTI to support the respondents if necessary, while they completed the questionnaires. The contact details of the researcher were available if the respondents needed clarification regarding the questionnaire or any concerns regarding the research.
    - Data collection were done anonymously and questionnaires coded and kept in a secured place.
    - The results of the study will be disseminated on various academic platforms. However, no individual information will be made public.
    - No vulnerable populations were included in the study.

6. Veracity, were upheld as the researcher was committed to tell the truth (Botma *et al.*, 2010: 26). The following was done:

    - Two persons coded, captured and verified the data. The Microsoft Excel data sheets were then sent to the biostatistician for statistical analysis. These measures decreased the possibility of the researcher

misrepresenting the respondents' answers.

- The results will be disseminated in a research report, as an article in an accredited journal.

7. Advocacy was to be applied by filling gaps of current practices through the results of the study. The results of the study will be shared with the relevant stakeholders.

    - Report of the study results will be shared with the UFS, the MoH Lesotho, CHAL and six NTI's.
    - Dissemination of the study results will be in relevant platforms such as conferences and as an article to a peer-reviewed accredited journal.

8. Confidentiality was considered by allowing only the research team to have access to completed questionnaires.

    - Anonymity was not possible, since the fieldworkers were assisting in data collection.

    - Raw data could not be associated with specific individuals.

The principles related to the Singapore Statement of Research Integrity observed were honesty in conducting the research, obtaining and interpreting the results. Accountability in conducting the study, professional curtesy and fairness were upheld throughout the research process (Resnik & Shamoo, 2010).

Principles that are applicable during data collection are respect for people, justice and beneficence (Botma *et al.*, 2010: 17). Respect for people involve maintaining people's confidentiality in such a way that collected data could not be linked to a particular person even by the researcher. To achieve this the questionnaire codes were available, access to data was limited to the researcher and study supervisor. The data was properly locked away in a cabinet during data collection and thereafter.

Principle of justice is about treating respondents fairly and not introducing interventions not mentioned on the information leaflet. Any technique or intervention, if executed, requires consent from the respondents. The beneficence principle is about doing good and no harm to respondents (Botma *et al.*, 2010: 17).

The Ethics Committee Faculty of Health Sciences (ECUFS NR 196/2015), the Ministry of Health (MoH) Lesotho, CHAL and NTIs, approved the study.

3.9 DATA ANALYSIS

Data analysis is the process through which the researcher identifies key patterns and features which are important in answering the research questions by statistical analysis (Moule & Goodman, 2009: 323; Botma, *et al.*, 2010: 83).After coding, capturing and verification of codes, data was analysed (cf. TerreBlanche, *et al.*, 2014: 99). A biostatistician at a Department of Biostatistics did the data analysis using the statistical package SPSS. Numerical variables were summarised by means, standard deviations or medians and percentiles. Categorical variables were summarised by frequencies and percentages. The data and the interpretation thereof can be found in chapter four.

3.10 VALUE OF THE STUDY

The study should benefit a wide range of stakeholders in higher education and healthcare in Lesotho and beyond.

The study results might benefit students. If nurse educators' express SD they might be able to motivate students to develop their self-direction in learning. The support, which students would get towards becoming self-directed learners was assumed to enhance the quality of their nursing and midwifery practice, open their minds to prospects of change, advance their current skills, and enable them to portray confidence and

professionalism (cf. Chen *et al.*, 2012: 148; Shen *et al.*, 2014: 1; Van Rensburg & Botma, 2015: 1503).

Students could benefit by developing independence, motivation and increased choice of how they want to learn if their educators exhibit high levels of SD and professional development in a constantly changing workplace (Shen *et al.*, 2014: 1). If facilitated by self-directed educators, students might also benefit by obtaining skills inherent to SDL such as increased curiosity, critical thinking, retention and recall, improved decision-making, motivation, competence and confidence (Shen *et al.*, 2014: 1).

Young nurses need these competencies considering the fact that the nursing workforce is aging worldwide, and that there will be an ever-increasing demand for responsive healthcare services. Self-directed students would increase their options as lifelong learners and SDL would capacitate them to tackle and explore learning beyond what traditional education offers (Montin & Koivisto, 2014: 1; Seifert *et al.*, 2016: 3; Zhang, *et al.*, 2012: 570).

The study measured educators' SD in learning and identified possible gaps in this regard. Educators exhibiting significant SDL often have a good sense of self-understanding, are dedicated to their jobs and reflect high levels teaching competence (Chen *et al.*, 2012: 143). Educators could therefore try to improve their life-long and SDL skills.

The study should provide baseline data about the status of nurse and midwifery educators' SD in Lesotho. The different NTI's could implement strategies based on the study findings to support nurse and midwifery educators to develop or advance the necessary SD skills. Improved SD should enable educators to implement new initiatives such as a competency-based curriculum.

3.11 SUMMARY

A quantitative cross-sectional design was used to determine the self-directedness of nurse educators in Lesotho. The respondents completed the questionnaires upon agreeing to participate. All respondents in an institution gathered in a hall to fill the questionnaires. Data was captured in a spreadsheet, checked by a supervisor. A biostatistician at the Department of Biostatistics completed the statistical analysis. Interpreting and describing the results was the responsibility of the researcher.

CHAPTER 4: DISCUSSION OF RESULTS

Chapter 3 consisted of a detailed explanation of the research methodology used in the study to answer the research question, "To what extent do nurse and midwifery educators in Lesotho have self-direction in learning? Chapter 4 will include a discussion of the analysis of data that was collected by means of the adapted PRO-SDLS questionnaire (Stockdale & Brockett, 2011:162). The questionnaire collected demographic information (Section A), and included statements about teaching and learning transactions, that had to be rated (Section B) based on the PRO model. In Section C, respondents had the opportunity to answer a set of open-ended questions to determine factors in their social context that influence self-directed learning. No sampling was done, and 62 (82.7%) of the total population of 75 of nurse educators agreed to participate in the study.

Note: The concepts self-direction (SD) and self-directed learning (SDL) were used interchangeably.

4.1 SECTION A: DEMOGRAPHIC INFORMATION

Section A of the questionnaire consisted of questions related to demographic information of the respondents in the study. The categories that were included in this section were gender, age, ethnicity, highest qualifications, experience of teaching, curriculum involved in, duration of involvement and the type of curriculum preferred. The respondents' demographic information provided insight into their profile. The results in this section will be described using frequencies, percentages and visual presentations.

4.1.1 Gender N=62

Almost 81% (80.7%, n=50) of the respondents indicated that they were women, while far fewer (14.5%, n=9) were men. Less than five percent (n=3) chose not to disclose their gender.

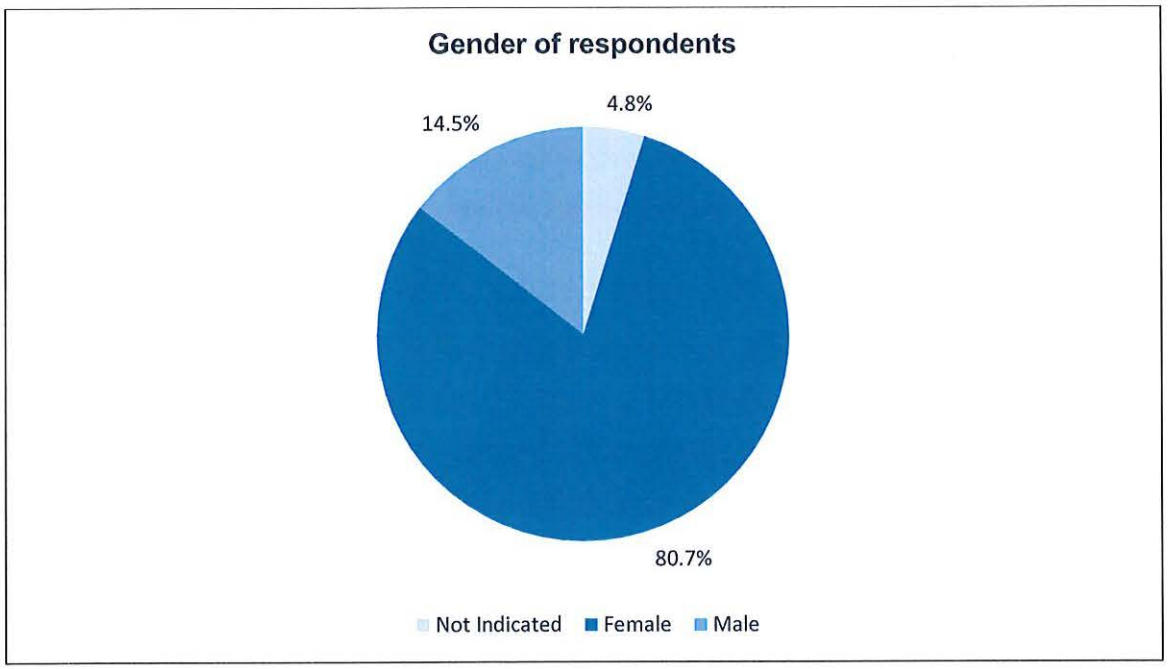


Figure 4.1 Gender of respondents

The data related to gender depicted in Figure 4.1 is consistent with international studies, which define nursing as an occupation dominated by women. The proportion of men in the nursing profession remains low, despite numerous efforts to recruit nurses from this population (McLaughlin, Muldoon & Moutray, 2010:303). According to McLaughlin and co-authors, male nurses in the United Kingdom (UK) comprise approximately 10.2% of the nursing fraternity, and 5% in the United States of America (USA), thus, creating a concerning gender gap between male and female nurses. On continents such as Europe, Australia and North America, and some countries in Asia and Africa, female nurses tend to dominate the profession. The representation of men in the profession ranges between five and ten percent, except in southern Europe, where more than 20% of nurses are male (Chan, Chan, Lui, Yu, Law, Hung, Kei, Yu,

Woo, Lam, 2014:377; Hullup, 2014:753; Kouta & Kaite, 2011:60). Considering the proportions of female to male nurses found by this study, Lesotho is no exception to this phenomenon.

Possible reasons for the skewed proportion of male to female nurses could be that genders influences career choice (McLaughlin, *et al.*, 2010:303). Referring to a female nurse as "nurse" and a male nurse as "male nurse" suggests differences in relation to gender, and that the occupation is generally reserved for women (McLaughlin, *et al.*, 2010:303). Furthermore, negative stereotyping of the masculinity of men in the nursing profession could deter men from entering the profession (Hullup, 2014:753).

Yuan, Williams, Fang and Pang (2012:429) studied the role of gender in the development of SD. According to these authors, gender did not play a specific role in individuals' SD in learning; however, it might be important for the minority of male nursing students to have male role models. On the other hand, similarities observed between SDL and gender were subject specific, as men performed better than women in certain courses, because men received encouragement from the environment, while women enrolled for similar courses were not encouraged (Botha & Coetzee, 2016:248).

4.1.2 Age N=62

Slightly more respondents (56.5%, n=35) were between 25 and 45 years old than respondents who were older than 46 years (43.5%, n=27); of the total number of 62 respondents, 51 (82.3%) were in the age group 25 to 55 years. Figure 4.2 illustrates the age group distribution of respondents. A slight tendency towards the younger age group can be seen in Figure 4.2.

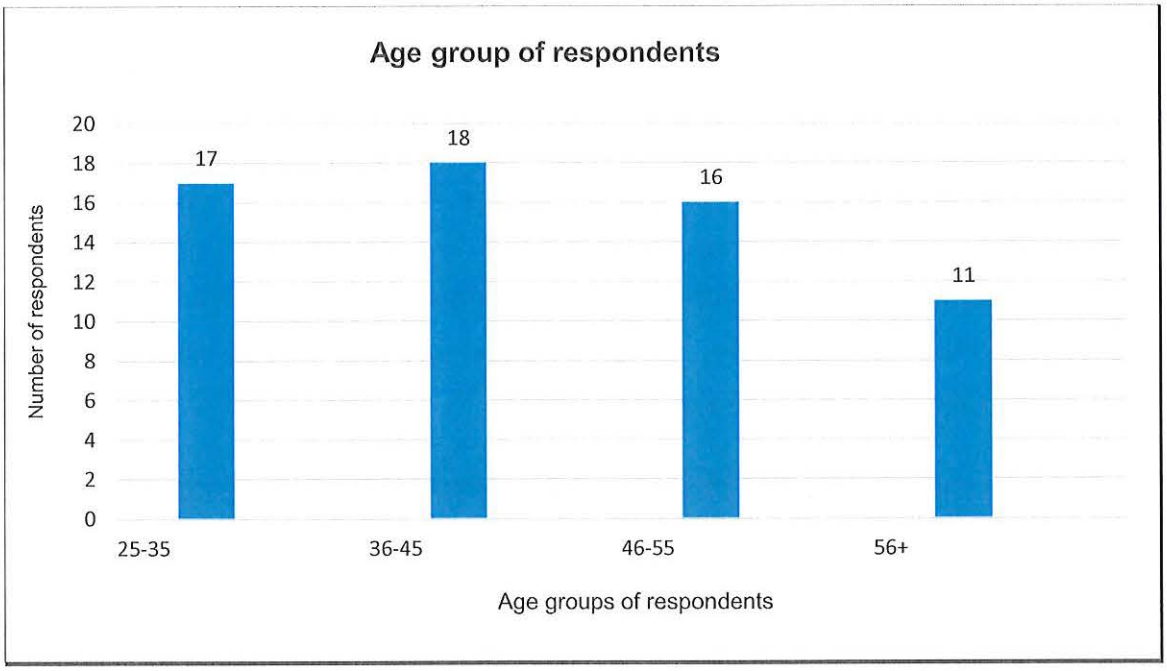


Figure 4.2 Age groups of respondents

Botha and Coetzee (2016:258) confirm a significant variation between age groups, inclusive of gender and race, in terms of nurses' self-directedness. In fact, generally, SDL is considered to be suitable for higher education, and Wilcox (1996) claims that SDL is a synonym for adult education. In the context of the study, educators were involved in higher education despite their age differences. It has been noted that, as age increases, SDL increases (Botha & Coetzee, 2016:248). Even though SDL is influenced by several factors, such as environment stimuli, every individual has the potential for growth and development (Wilcox, 1996).

Marshall and Merritt (1986, cited by O'Shea, 2003:65) found that educators were more self-directed than the students were. Mature students – those who had completed basic qualifications – exhibited more SD than students entering nursing education for the first time. In the same manner, older adults with experience were more likely to develop and show SD (Cadorin, Suter, Dante, Williamson, Devetti & Palese, 2012:156). Based on these findings, one could conclude that SDL could be higher in older and more experienced educators. However, as in the case of more mature

students, the life experiences of older educators, might present obstacles to developing SD or SDL, due to their established set of attitudes, thinking and educational experience (Spies, Seale & Botma, 2015:6).

4.1.3 Ethnic group N=62

All the respondents (100%, n=62) indicated that they were African. This prevailed in the Nurse Training Institutions (NTIs) of Lesotho. This finding was expected, considering the size and location of this country.

No literature could be located indicating differences in SDL amongst ethnic groups. However, Link (2015) contends that people from disadvantaged communities may be socially alienated and therefore not attach value to the benefits of learning, or not be motivated to develop SD.

4.1.4 Highest qualification N=62

The majority of the nurse educators (59.7%, n=37) who participated in this study held at least a Bachelor's degree, followed by those (38.7%, n=24) who had obtained Master's degrees. One educator (1.6%) holds a PhD (refer to Figure 4.3).

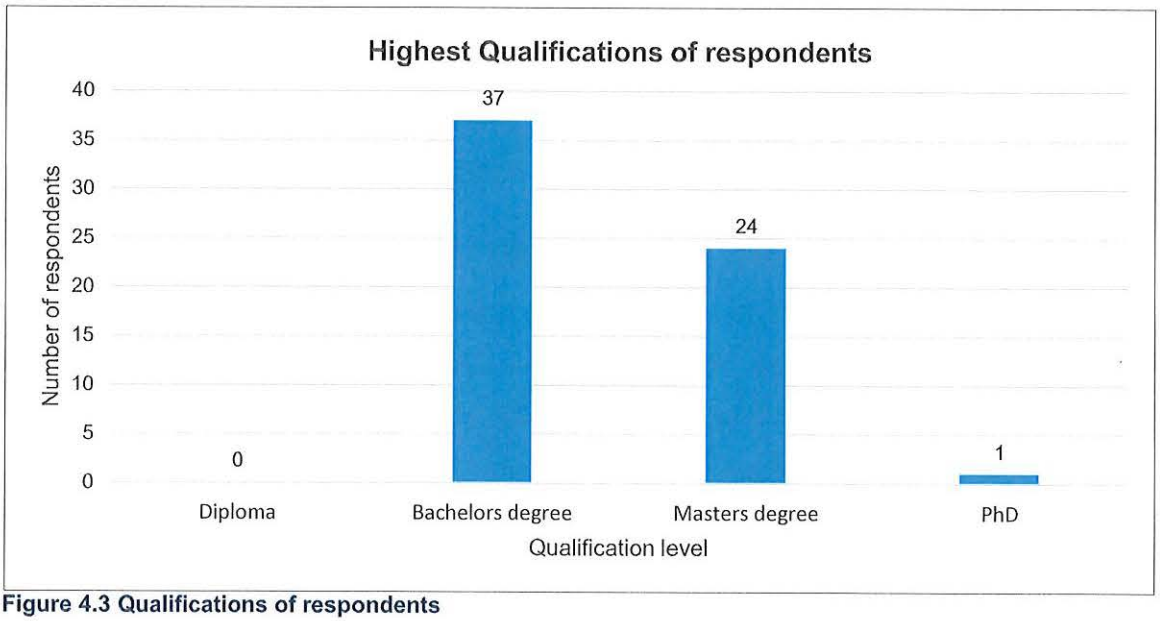


Figure 4.3 Qualifications of respondents

In Lesotho, all educators have at least a qualification in education, with about 38% holding Master's degrees, as indicated even in the statistics (Botma, 2014:27). This was impressive, considering that the highest qualification someone can be awarded by an educational institution in Lesotho is Bachelor's degree, which is offered by the National University of Lesotho only.

It has been reported that students who were taught by experts, that is, individuals who demonstrate more knowledge on the subject matter and obtained specific qualifications in that aspect, reflected more SDL than those taught by non-experts. It is, thus, assumed that the higher the skills and qualifications one had obtained, the more SDL one can inspire in others (O'Shea, 2003:67). According to Sethi, Schofield, Ajjawi and McAleer (2016:164), advanced qualifications prepared nurse educators to be better equipped in all areas of work, including self-directedness. Sethi and co-authors (2014) found that, after obtaining a higher qualification, nurse educators felt better prepared to handle different and advanced educational challenges (Sethi, *et al.*, 2016:164).

4.1.5 Years' of experience teaching N=61

Figure 4.4 shows two large groups at two ends of the spectrum of years' experience. The 0-5 years group included 39.3% (n=24) respondents, while the group with more than 16 years' experience totalled 32.8% (n=20). The two distinct groups indicate an experienced group of educators and a more recent intake of less experienced academic staff.

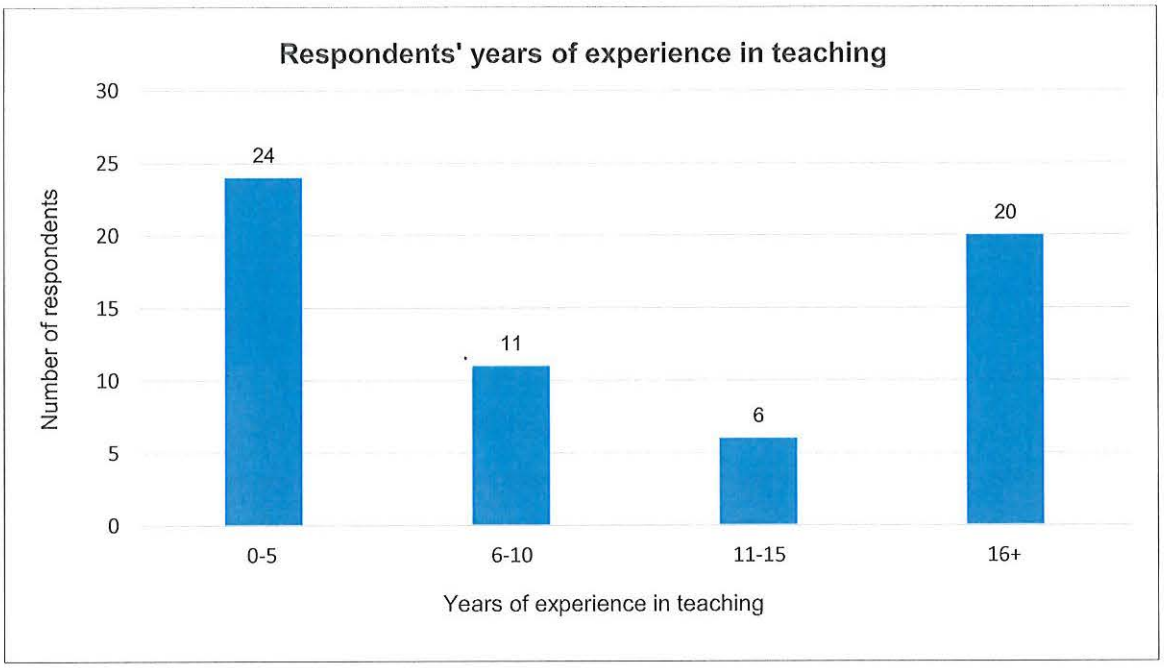


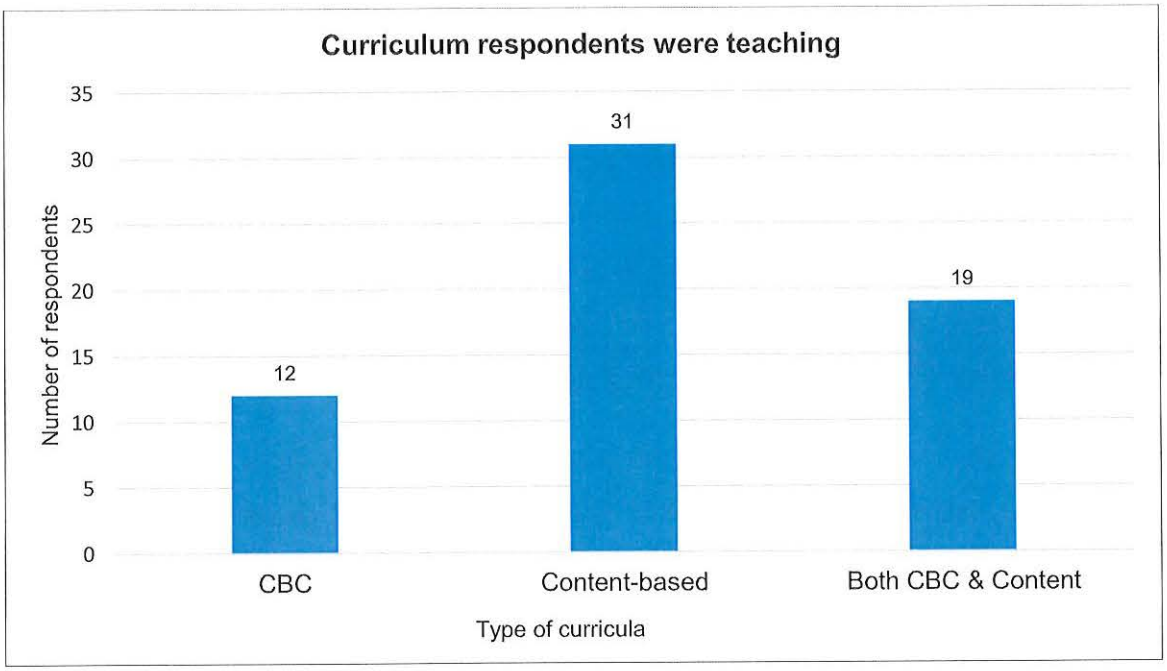
Figure 4.4 Respondents' years of experience in teaching

There were more younger educators, with less teaching experience (n=24) than more experienced educators (n=37). According to Botha and Coetzee (2016:242) older educators, that is, older than 50 years, scored higher on self-efficacy in terms of SDL. This study observed that older, more experienced educators (n=20) formed the majority of those who were employed. The assumption is that these experienced educators would be responsible for grooming and moulding younger and less experienced educators. However, young educators or adult learners' lived experiences might influence their readiness to learn. This could be due to existing sets of attitudes, ways of thinking and convictions (Spies, *et al.*, 2015:1).

4.1.6 Type of curriculum respondents are currently teaching N=62

Half (50%, n=31) of the respondents were responsible for teaching a content-based curriculum only, for example, general nursing, compared to 19.4% (n=12) who were teaching a competency-based curriculum only. A group of 19 respondents (30.6%) was teaching both competency- and content-based curricula. Included in this latter

group were respondents who taught midwifery using a competency-based curriculum, and general nursing science using a content-based curriculum (refer to Figure 4.5).



* Competency-based Curriculum (CBC)

Figure 4. 5 Types of curricula respondents were teaching

Five nurses training institutions in Lesotho, excluding the National University of Lesotho, implemented a competency-based curriculum in 2014 for the Diploma in Midwifery. The implementation followed extensive training of midwifery educators. At the time, training was still content-based for all general nurses (Nyoni & Botma, 2017:12).

Content-based curricula require rote memorisation of factual knowledge, while competency-based curricula endorse an understanding of concepts, skills and competencies. Changes in educators' attitudes call for teaching and learning approaches that enable them to determine the behaviour students should demonstrate during and after completion of the curriculum (Komba & Mwandanji, 2015:73; Vallejos, Morel & Tusing, 2017:2). Content-based curricula were found to be ineffective, as it delivered graduates who failed to demonstrate the skills demanded by local, national,

and global markets (Komba & Mwandanji, 2015:73). In response to the Nursing and Midwifery Strategic Plan of 2010-2015, Lesotho, like other developing countries, gradually introduced a competency-based curriculum (Nyoni & Botma, 2017:11).

4.1.7 Months respondents had been teaching a specific curriculum N=62

Twelve respondents (19.4% of the total population) were teaching in the competency-based curriculum. In this group, five respondents (8.1%) had been involved for longer than 18 months, followed by four (6.5% of the total population) who had been part of this curriculum for 13-18 months. Fewer respondents (3.2%, n=2) were involved for less than 6 months, and one (1.6%) for 7-12 months (refer to Figure 4.6).

Of the 19 respondents (30.6% of the total population) who were involved in both competency-based and content-based curricula, the largest group (8.1%, n=5) had been involved for longer than 18 months, followed by four (6.5%) for maximum 6 months. Three respondents (4.8%) had been involved for 7-12 months, and one (1.6%) for 13-18 months.

Six respondents did not indicate the number of months they had been involved in a specific curriculum. The frequencies of groups across the content-based curriculum were higher, because it used to be the only mode of curriculum delivery in Lesotho (Botma, 2014:23).

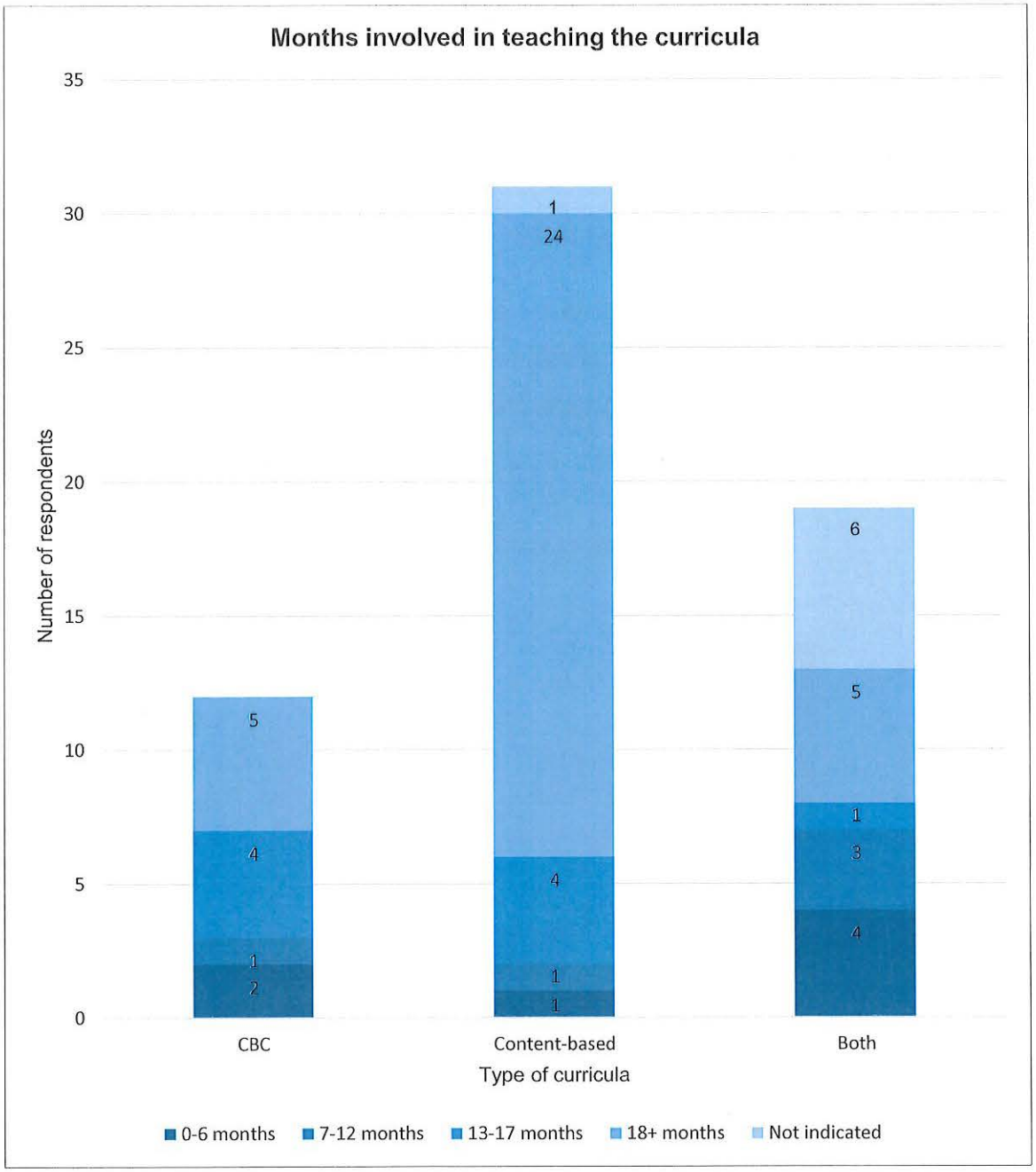


Figure 4.6 Months involved in teaching the specific curriculum

The curriculum for any programme calls for review after a certain period, to accommodate ever-changing societal needs (Komba & Mwandanji, 2015:73). Any change in the curriculum needs to be introduced gradually, or piloted before

implementation, to test its fitness for purpose. In this instance, educator development was crucial for the implementation of a competency-based curriculum, because the required mind-shift could not be made in a day or two (Botma & Nyoni, 2015:6; Iglar, Whitehead & Takahashi, 2013:115).

4.1.8 Type of curriculum preferred N=56

The majority (80.4%, n=45) of respondents preferred a competency-based curriculum, as opposed to the content-based curriculum (12.5%, n=7). Four respondents (7.1%) did not prefer a specific curriculum type. Respondents' preferences are illustrated in Figure 4.7.

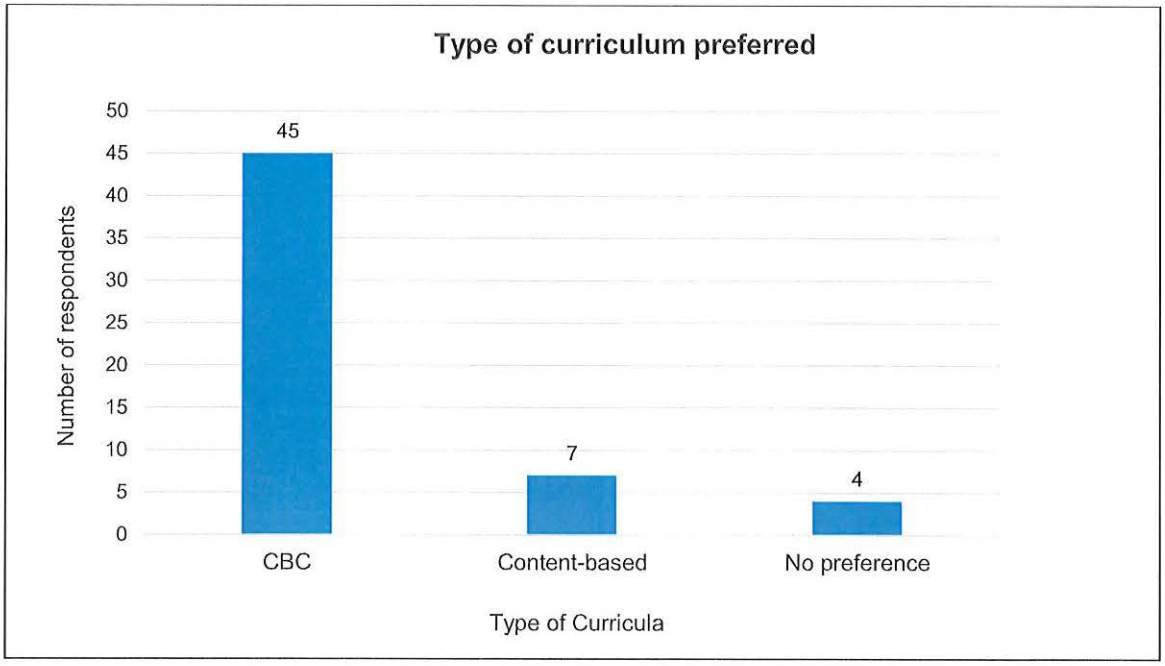


Figure 4.7 Type of curriculum respondents preferred

A competency-based curriculum was preferred by more educators (n=45) than a content-based curriculum (n=7). This could be due to the advantageous nature of a competency-based curriculum, which provides an integrated form of knowledge, including problem-solving, critical and constructive reflection, and communication. This curriculum approach also encompasses a combination of knowledge, skills and

attitudes appropriate to the teaching and learning context (Karameta, 2013:331; Vallejos, *et al.*, 2017:6). The preferences of educators in this study in relation to a competency-based curriculum were consistent with Vallejo, *et al.* (2017:6), who also found a competency-based curriculum to be preferred. Active involvement of students with the aim of developing their competences, rather than rote learning, is key to a competency-based curriculum (Andronache, Bocos & Neculau, 2015:716; Winter, 2011:339)

Some respondents alluded to challenges related to implementing a competency-based curriculum (refer to Section C). Almost half the respondents (45.2%, n=28) asked for more support in terms of resources for teaching and learning. Their concern was consistent with findings by Komba and Mwandanji (2015:74), who state that pre-service teachers in Tanzania needed experience and support to implement a competency-based curriculum. Supporting educators by providing resources, such as time, material and human resources, could enhance the implementation of a competency-based curriculum. The role of educators in the educational system remains key, regardless of the approach of the educational processes (Karameta, 2013:325). Nasri (2017:2) contends that educators are crucial in educational reform in higher education institutions. In the context of Lesotho, a paradigm shift would be required to move from a content-based to competency-based curriculum, and to sustain such an approach.

4.2 SECTION B: TEACHING AND LEARNING TRANSACTIONS

Section B contains the results of the administration of the PRO-SDLS. The researcher adopted and slightly adapted the instrument proposed by Stockdale and Brockett (2011:63) as described in Chapters 1 and 3. (Also, refer to Annexure C: Conversation with Stockdale and Brockett). The section consisted of 30 statements addressing teaching and learning transactions.

The questionnaire measured two components of SDL in the respondents, namely, self-development: preparedness to implement, and educators' characteristics component. Each of the components consisted of two factors. Scores on initiative and control determined self-development: preparedness to implement. Scores on self-efficacy and motivation determined educators' characteristics. A range of random statements in the questionnaire measured the four factors. The result for each statement was calculated by the number of responses (n=62) multiplied by the prescribed value allocated in the Likert scale [refer to Stockdale and Brockett's (2011) questionnaire, and view the questionnaire in Annexures A and B].

Note: Some statements in Section B of the questionnaire were phrased negatively in order to avoid response-set bias (Grove, et al., 2013: 431). The scoring was reversed for these cases to ensure the calculations could be compared to the positively phrased statements (see annexures E and F). The statements with reversed scores are 3, 6.1, 6.2, 11, 13, 16, 18.1, 18.2, 20.1, 20.2, 21, 22, 24 and 25.

4.2.1 Component 1: Self-development: preparedness to implement N=62

Scores on initiative and locus of control measured educators' preparedness to implement a competency-based curriculum.

4.2.1.1 Initiative

The importance of the need for initiative formed an essential part of the definition of SDL, where SDL is:

> *A process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating learning outcomes* (Knowles, 1975, cited by Stockdale & Brockett, 2011:164).

A difference in terminology observed between authors, is that Stockdale and Brockett (2011:165) refer to personal responsibility rather than initiative; however, personal responsibility is indicative of initiative. Regardless, education experts identify initiative as one of three necessary characteristics of self-directedness (Stockdale & Brockett, 2011:165).

The literature notes identifiable behaviours that signify SD in learning, such as having initiative, which, according to Brockett and Hiemstra (1991), is an important driver of a person's SDL. In the context of the study, the initiation skill is necessary to implement a competency-based curriculum (Jaleel & Anuroofa, 2017:1849). The statements that measured initiative are 2, 9, 10.1, 10.2, 15, 17 and 25, as labelled in Table 4.1. Note that statement 25 had a reversed score (see 4.2).

Table 4.1 Statements related to respondents' initiative

NUMBER	STATEMENTS
Statement 2	I frequently do extra work regarding the course I facilitate just because I am interested
Statement 9	I would rather take the initiative to learn new things rather than wait for my superior to initiate new teaching approaches and the learning it requires
Statement 10.1	I often use materials I have found on my own to help me with the courses I facilitate
Statement 10.2	I have the means to find new materials on my own to help me with the courses I facilitate
Statement 15	Even after facilitating a course, I continue to spend time reading about the topic to get a broader perspective
Statement 17	I often collect additional information about interesting topics even after the course has ended
Statement 25	I always rely on the superior to tell me what I need to do in the course I facilitate

Figure 4.8 reflects the respondents' scores on initiative.

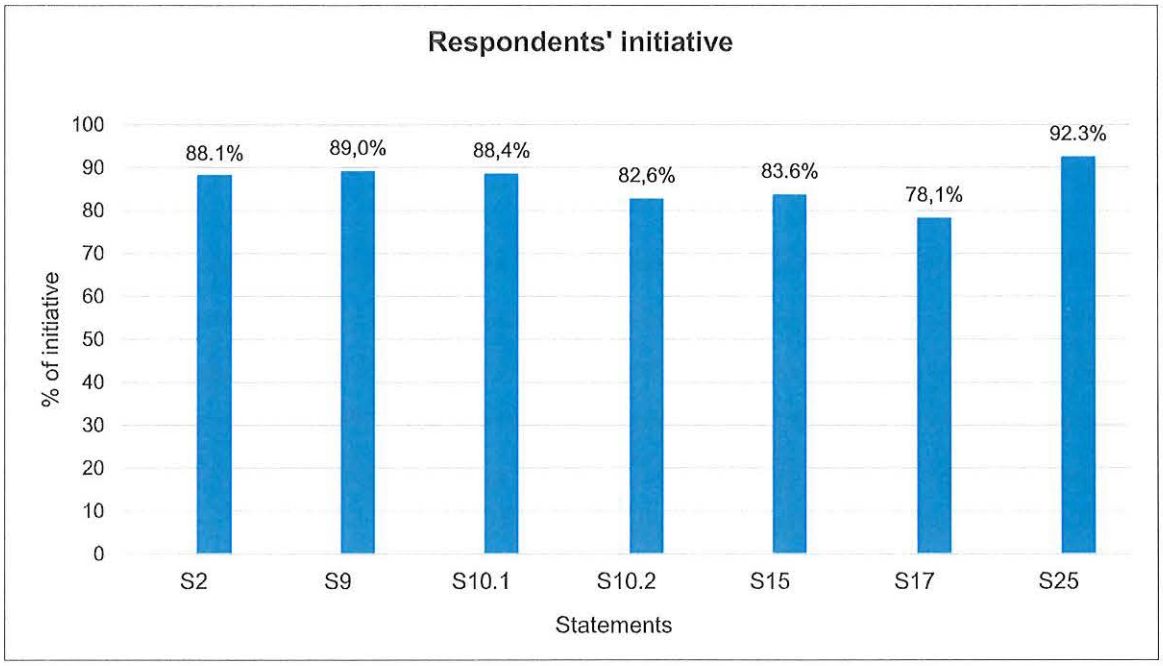


Figure 4.8 Respondents' scores on initiative

The scores ranged from 78.1% to 92.3% (median 88.1%), which showed an excellent level of SDL in terms of initiative only. High scores on initiative signify independence in the identification of learning needs, planning, and implementation of teaching strategies, as well as evaluation of learning goals. Taking initiative affects SDL positively, because, for SDL to be improved, one has to independently identify learning needs, set goals and evaluate such goals (Stockdale & Brockett, 2011:165). It is important to embrace the skill of taking the initiative, in both educators and students, to such an extent that both parties engage in discovery learning. Educators should act as role models for teaching and learning (Nottidge & Louw, 2017:30; Van Rensburg & Botma, 2015:1).

4.2.1.2 Locus of control

Locus of control refers to the ability to set own learning goals, make decisions, and be in control of the teaching and learning process (Van Rensburg & Botma, 2015:5). According to Abraham, Fisher, Kamath, Izzati, Nabila and Atikah (2011:395),

individuals with high SDL scored higher on self-control. Educators' locus of control was determined by statements 4, 5, 6.1, 6.2, 13, 19 and 23. Note that statements 6.1, 6.2 and 13 had reversed scores (see 4.2).

Table 4.2 Statement related to respondents' locus of control

NUMBER	STATEMENTS
Statement 4	If my students are not doing as well as I would like in a course, I always independently make changes necessary for improvement
Statement 5	I always effectively take responsibility for my own teaching and learning
Statement 6.1	I often have a problem motivating myself to update my knowledge
Statement 6.2	I often have a problem to find time to update my knowledge
Statement 13	I usually struggle at work to manage time to complete competing tasks
Statement 19	I am very successful in prioritising my teaching and learning goals
Statement 23	I always effectively organise my teaching and learning time

Figure 4.9 displays the results of the seven statements in Table 4.2 in a bar chart.

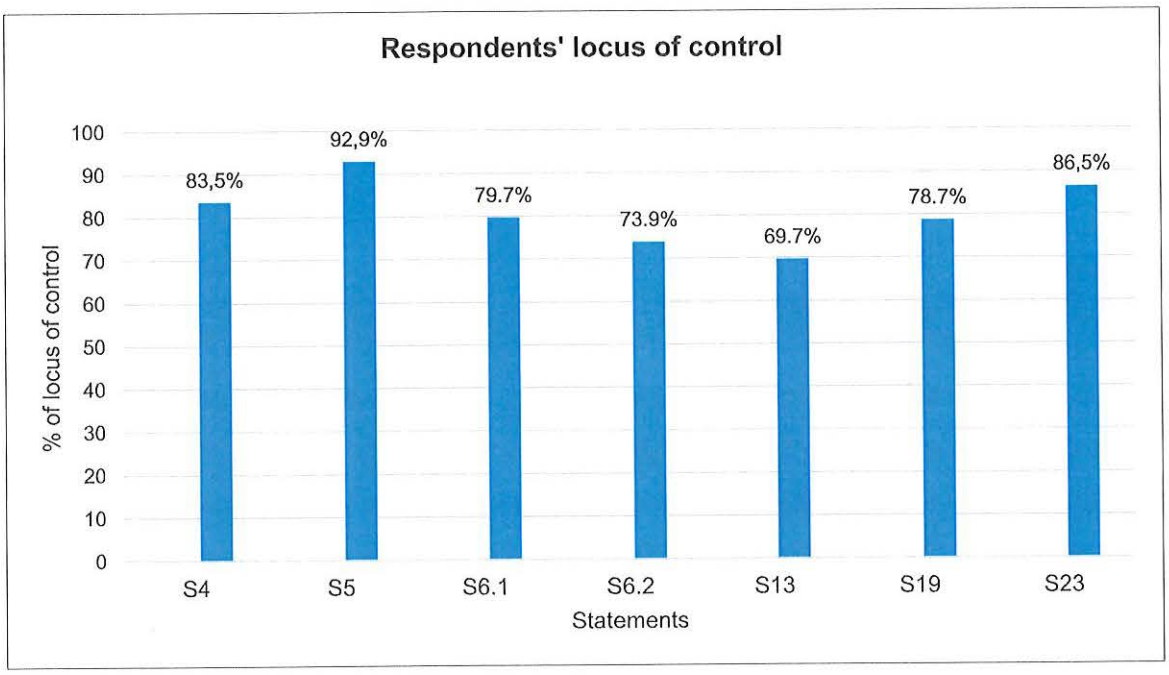


Figure 4.9 Respondents' scores for statements on locus of control

Locus of control scores ranged from 69.7% to 92.9% (median 79.7%). The statement results were determined using the measures of central tendency. In this case, the median was considered to be best suited to rating the scores, as the frequency included outliers (Salkind, 2008:29). The educators feel in control of setting their learning goals and acting upon them (Brockett & Hiemstra, 1991).

In summary, educators' self-development: preparedness to implement was calculated using the percentages obtained for each statement listed under initiative and locus of control; the central tendency (mean and median) was calculated as depicted in Table 4.3.

Table 4.3 Central tendency of initiative and locus of control

Central tendency	Initiative scores	Locus of control scores
	78.1	69.7
	82.6	73.9
	83.6	78.7
	88.1	79.7
	88.4	83.5
	89.0	86.5
	92.3	92.9
Mean	**86.0**	**80.7**
Median	**88.1**	**79.7**

The scores for self-development: preparedness to implement were calculated using the median of two factors, namely, initiative (88.1%) and locus of control (79.7%). In this study, educators' preparedness to implement (as the mean of the two median scores) was 83.9%, which is an excellent level of SDL. The median was used instead of mean, as the median was insensitive to extreme scores, unlike the mean (Salkind, 2008:25) – this was relevant as the data had outliers or extreme scores.

Both factors, initiative and locus of control, demonstrate planning, implementation and evaluation of the learning process (Stockdale & Brockett, 2011:165). In this study, the educators' locus of control was excellent, at 79.7%. The high percentage could be an indication of educators' SDL where their locus of control is concerned. Educators' scores on locus of control demonstrate character traits of SD that help them to achieve their own goals through their own efforts (Van Rensburg & Botma, 2015).

4.2.2 Educators' characteristics component N=62

Educators' characteristics were determined by two factors, namely self-efficacy and motivation.

4.2.2.1 Self-efficacy

Self-efficacy relates to someone's confidence in executing a task, and individuals with a high level of self-efficacy are self-directed in their learning (Cazan & Schiopca, 2014:641; Stockdale & Brockett, 2011:166). Knowles (1975, as cited in Merriam & Bierema, 2014:69) indicates that SDL is associated with self-efficacy, thus, the more responsibility you take in learning, the more confident you become.

The statements that measured self-efficacy are 1, 7, 12, 21, 22, and 24, as listed in Table 4.4. Note that statements 21, 22 and 24 had reversed scores (see 4.2).

Table 4.4 Statements related to respondents' self-efficacy

NUMBER	STATEMENTS
Statement 1	I am confident in my ability to consistently motivate myself
Statement 7	I am very confident in my ability to independently prioritise my teaching and learning goals
Statement 12	I am very convinced that I have the ability to take personal control of my teaching and learning activities
Statement 21	I am really uncertain about my capacity to take primary responsibility for implementing the proposed curriculum changes
Statement 22	I am unsure about my ability to independently find needed outside materials for the course I facilitate
Statement 24	I do not have much confidence in my ability to independently carry out proposed curriculum changes

Figure 4.10 depicts the results of the statements listed in Table 4.4 in a graph.

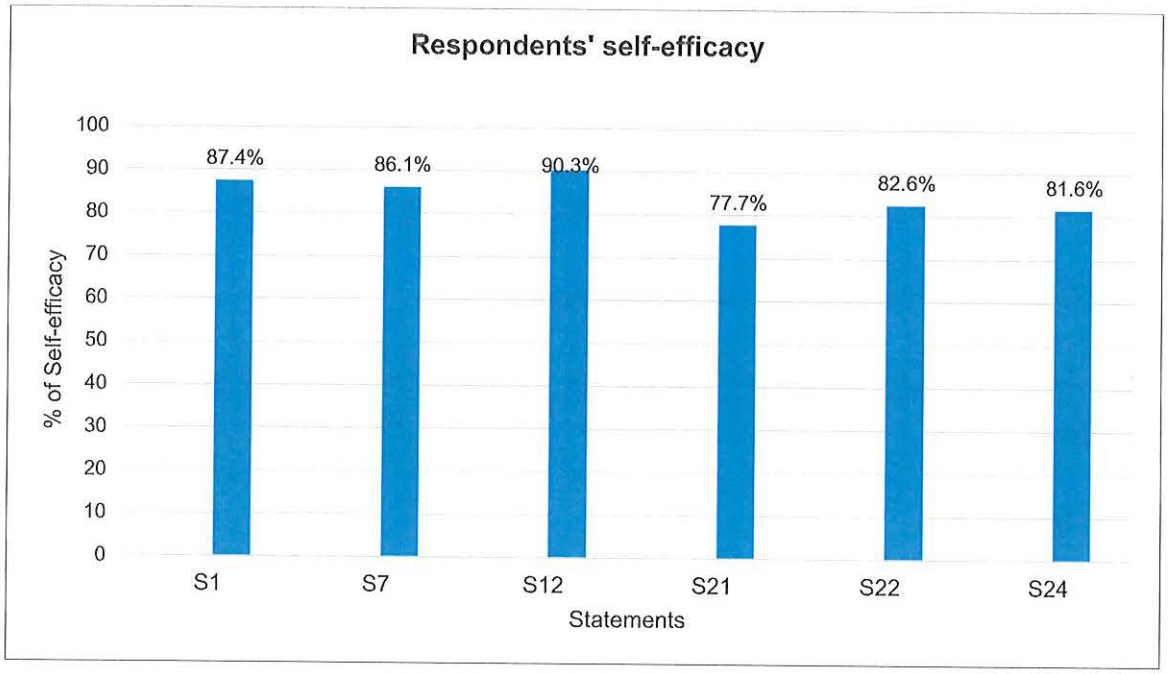


Figure 4.10 Respondents' scores for statements on self-efficacy

Scores on self-efficacy ranged from 77.7% to 90.3% (median 84.4%). The results indicate an excellent level of SDL, which implies that respondents have confidence in executing tasks. The demonstrated level of educators' self-efficacy portrayed confidence in their work, despite lacking resources and not having enough time in the class with students, as alluded to before (refer to 4.1.8).

Variations in self-efficacy is related to the subject matter at hand, for instance, women score higher than men on writing and reading skills. On the other hand, in courses like electricity, as a technological subject, men scored higher than women in self-efficacy (Botha & Coetzee, 2016:248). The factors that might have contributed to the difference are attributed mostly to cultural differences. Women are not encouraged or supported in technological subjects as men are (Botha & Coetzee, 2016:248).

In the context of the current study, the above findings may not apply, because the study did not address specific subject matter where differences in SD in relation to

gender could be measured. Kek and Huijser (2011:200) contend that individuals with high self-efficacy demonstrate high SDL, and that individuals with high SDL generally have access to a supportive environment, either at school and home, to such an extent that their parents were mostly active in higher education activities. The need to investigate and realise levels of proficiency in SDL remains valid (Cremers, Wals, Wesselink, Nieveen & Mulder, 2014:208).

4.2.2.2 Motivation

Motivation to learn is defined as having an inner drive that gives an individual the energy to maintain learning and achieve goals through objective understanding during learning activities; motivation increases with the age of an individual (Mulube & Jooste, 2014:1779). Motivation could be either intrinsic (behaviour prompted by enjoyment and interest in the activity), or extrinsic (behaviour prompted by external contingencies and rewards). Intrinsic motivation has been commended as being more desirable in the learning process, because it is not influenced by rewards, but inner drive (Mulube & Jooste, 2014:1779; Stockdale & Brockett, 2011:166). Note that SDL emphasises engagement and motivation for learning as outcomes of self-directed learning experiences. Furthermore, motivation was regarded as a key factor in the initiation and maintenance of effort to achieve SD (Beach, 2017:61, 71).

In this instance, the level of motivation of respondents was excellent, which means that they demonstrated high SDL, which was the cornerstone of cognitive responsibility and critical thinking (Mahmud, Munir, Hyder & Haroon, 2014:173). One must remember that motivation is a prerequisite for SDL; educators who are highly motivated have high SDL (Sirakaya & Ozdemir, 2018:78).

The statements that measured motivation are 3, 8, 11, 14.1, 14.2, 16, 18.1, 18.2, 20.1, and 20.2 as listed in Table 4.5. Note that statements 3, 11, 16, 18.1, 18.2, 20.1 and 20.2 had reversed scores (see 4.2).

Table 4.5 Statements related to respondents' motivation

NUMBER	STATEMENTS
Statement 3	I do not see any connection between the work I do and my personal goals and interests
Statement 8	I complete most of my work-related activities because I want to, not because I have to
Statement 11	For the course I facilitate, I really do not know why I have to include certain content I have to
Statement 14.1	Most of the work in my courses is personally enjoyable
Statement 14.2	Most of the work I do seems relevant to reasons for doing it
Statement 16	The primary reason I adhere to course requirements is to assist students to obtain the outcomes expected of them
Statement 18.1	The main reason why I do the course activities is to avoid feeling guilty
Statement 18.2	The main reason why I use innovative teaching approaches is to avoid a low score on the performance management system
Statement 20.1	Most of the activities I complete for my work are not really personally useful
Statement 20.2	Most of the activities I complete for the course I facilitate are not really personally interesting

Figure 4.11 and Table 4.5 present the results obtained on educators' level of motivation. Motivation ranged from 39.0% to 85.2% (median 77.6%). The median indicated an excellent level of motivation, and thus SDL.

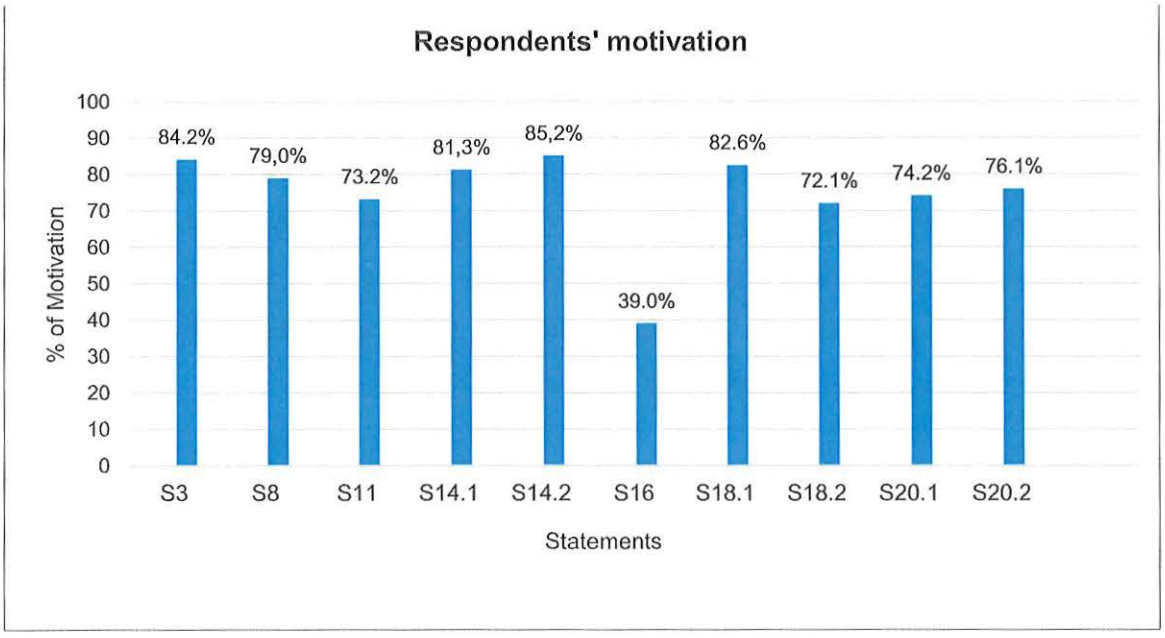


Figure 4.11 Respondents' scores for statements on motivation

Stockdale and Brockett (2011:166) contend that SD occurs when motivation for learning is either intrinsic or extrinsic, but chosen freely. Motivation as it relates to autonomy involves choice and absence of coercion.

In this study, the median indicated that educators' self-effectiveness was 84.4%, while motivation was 77.6%. Both scores are excellent, despite challenges relating to scarce resources to which respondents alluded (refer to 4.1.8). The calculation of a central tendency related to educators' characteristics component is given in Table 4.6.

Table 4.6 Central tendency of self-efficacy and motivation

Central tendency	Self-efficacy scores	Motivation scores
	77.7	39.0
	81.6	72.1
	82.6	73.2
	86.1	74.2
	87.4	76.1
	90.3	79.0
		81.3
		82.6
		84.2
		85.2
Mean	**84.3**	**74.7**
Median	**84.4**	**77.6**

The median of the educators' characteristics component was calculated by adding the median of two factors, namely, self-efficacy (84.4%) and motivation (77.6%), then dividing them by two to obtain a (mean) combined score, that is, 81.0%. The combined median indicates an excellent level of SDL.

The median of self-development: preparedness to implement, and educators' characteristics, was calculated by using the median for initiative and locus of control

(83.9%) and self-efficacy and motivation (81.0%), resulting in a combined mean of 82.5%, which portrayed an excellent level according to the scale proposed by Stockdale and Brockett (2011:163). The SDL of respondents' educators in Lesotho was therefore be confirmed to be excellent.

However, to support educators' SDL, encouragement by experienced educators is necessary in terms of initiative, locus of control, self-efficacy and motivation as essential components of building SDL. SD in learning is essential for implementing a competency-based curriculum.

4.3 SECTION C: CONTEXT

The third section included four open-ended questions. The questions related to, (1) orientation received before implementing a competency-based curriculum, (2) activities that compete with time to plan new innovative teaching strategies during working hours, and (3) activities that compete with planning new innovative teaching strategies after working hours. The last question (4) provided respondents with the opportunity to add additional information related to their teaching and learning.

The researcher read the statements of the respondents very carefully, identified categories, and then assigned each statement to an appropriate category. The statements in each category were counted and percentages calculated. As part of the discussion of the categories and statements in Section 4.3.1, the researcher will include reference to relevant literature.

4.3.1 Type of orientation received regarding a competency-based curriculum N= 62

The effective implementation of any type of curriculum requires a comprehensive orientation of those educators that will be involved. In this study, the researcher

identified seven categories relating to the type of orientation that respondents received; the categories are listed in Table 4.7.

Table 4.7 Type of orientation received regarding a competency-based curriculum

CATEGORIES	RESPONSE
Orientation during formal education	n= 3 (4.8%)
Orientation during workshops	n= 49 (79.0%)
Informal orientation from colleagues	n= 5 (8.1%)
Did not see need for orientation	n= 2 (3.2%)
No orientation	n= 2 (3.2%)
No response	n= 2 (3.2%)

In total, 91.9% (n=57) of respondents indicated receiving some form of orientation on the proposed curriculum. Most respondents (79.0%, n=49) were oriented during workshops before they implemented the competency-based curriculum, followed by 8.1% (n=5) who received informal orientation from their colleagues who had participated in the development of a competency-based curriculum. A few respondents (4.8%, n=3) received information on the competency-based curriculum approach during their formal training. However, 3.2% (n=2) did not see the need for orientation, as they viewed a competency-based curriculum and content based curriculum as being similar.

Orientation regarding the proposed competency-based curriculum is important, in order to prevent educators' from being influenced by the misconceptions of inexperienced teachers and/or students who term this curriculum approach as involving isolated learning; however, according to Du Toit-Brits and Van Zyl (2017:130), isolated learning in SDL could only be associated with distance learning.

Reports that some educators in Lesotho labelled the competency-based curricula and content-based curricula as similar, needs attention. Educators' perception that the two modes of curriculum delivery are similar could impact negatively on the transferability

of skills meant to develop their SD (Du Toit-Brits & Van Zyl, 2017:130). It is also important for educators to develop SDL prior to the implementation of competency-based curriculum, because the nature of the curriculum requires them to apply SDL to keep up with the academic pace. Literature confirms that, if educators cling to traditional teaching and learning approaches, their SDL cannot develop fully (Du Toit-Brits & Van Zyl, 2017:131).

4.3.2 Activities competing with educators' time for gathering new information during working hours N=62

In any educational institution, there are activities in addition to teaching and learning that compete with educators' time, and, to some extent, even compromise time meant for teaching and learning. Activities that compete for time meant for gathering new information during working hours can be assigned to nine categories (refer to Table 4.8).

Table 4.8 Activities competing with gathering new information during work hours

CATEGORIES	RESPONSE
Educator-specific activities, such as student assessments	n=17 (27.4%)
Administration-specific activities, such as meetings and departmental responsibilities	n=33 (53.2%)
Research output required by training institutions	n=1 (1.6%)
Community engagement responsibilities	n=1 (1.6%)
Compulsory workshops attendance	n=10 (16.1%)
Time spent to meet the Council on Higher Education's requirements for accreditation	n=2 (3.2%)
Inability to manage time spent on academic activities	n=1 (1.6%)
Time spent on continuing professional development activities	n=4 (6.5%)
No response	n=7 (11.3%)

The greatest number of respondents (53.2 %, n=33) referred to administration-related activities, such as meetings, consuming their time. Educator-specific activities, such

as assessment of students, were mentioned by 27.4% (n=17) of respondents being time-consuming activities.

4.3.3 Activities competing with educators' time for gathering new information after working hours N=62

Activities that may take precedence over the time intended to be spent developing teaching strategies, include family responsibilities. Six categories that consumed educators' time after work were identified (refer to Table 4.9).

Table 4.9 Activities competing with time to plan new innovative teaching strategies after work

CATEGORIES	RESPONSE
Family and personal activities	n= 42 (67.7%)
Setting and marking tests	n=9 (14.5%)
Time spent on travelling to and from work	n= 2 (3.2%)
Fatigue related to multiple responsibilities	n= 4 (6.4%)
No response	n=6 (9.7%)

Family and personal activities were noted by the greatest number of respondents (67.7%, n=42) as taking up time that could be used for planning teaching strategies. Marking, setting of tests 14.5% (n=9).

4.3.4 Additional information related to teaching and learning (N=62)

Respondents were invited to provide any other information related to their teaching and learning. Seven categories were identified, as indicated in Table 4.10.

Table 4.10 Additional information related to teaching and learning

DESCRIPTION	RESPONSE
Competency-based curriculum implementation contributed to educators' enjoyment of their work	n=5 (8.1%)
Lack of resources in teaching and learning	n=28 (45.2%)
Time constraints in class	n=6 (9.7%)
Students too young/unwilling to understand their role as learners	n=3 (4.8%)
Need capacity building to implement a competency-based curriculum	n=4 (6.5%)
A competency-based curriculum should be introduced soon	n=1 (1.6%)
No response	n=18 (29.0%)

Most respondents (45.2%, n=28) indicated that they lacked resources to support them in their teaching and learning. A few respondents (8.1%, n=5) experienced the implementation of a competency-based curriculum as positive, but indicated that they needed capacity building to implement a competency-based curriculum (6.5%, n=4).

Tanzanian pre-service educators indicated that capacity building was needed if new initiatives in teaching and learning were to be implemented successfully (Komba & Mwandanji, 2015:74).

4.4 SUMMARY

In Chapter 4, the researcher aligned the research results obtained during a meticulous data gathering process with the stated aim and objectives. The median scores of four important factors related to SDL were used, namely, initiative (88.1%), locus of control (79.7%), self-efficacy (84.4%) and motivation (77.6%), to facilitate the interpretation of nurse educators in Lesotho's SD learning. Doing so was important, because of the paradigm shift required to move from a content-based curriculum to a competency-based curriculum. A competency-based curriculum requires a new set of skills that are not critical for a content-based curriculum.

Respondents' SDL was calculated using the scores of the four factors listed above and the findings indicate their SDL as 82.40, which is excellent. The assumption would be that, if such scores could be maintained, implementation and maintenance of the competency-based curriculum would be successful. In Chapter 5, the researcher gives an overview of the study, by explaining the implications that educators' levels of SD and SDL have on implementing a competency-based curriculum. Lastly, recommendations to enhance SD and SDL, and limitations of the study, will be given.

CHAPTER 5: REFLECTION ON RESEARCH PROCESS, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

Chapter five describes the implications, recommendations, gaps and limitations related to the research. The study aimed to describe SD and SDL of nurse and midwifery educators offering a competency-based curriculum in Lesotho. In the context of the current study, SD is crucial to facilitate the successful implementation of such a curriculum. Unlike a content-based curriculum, a competency-based curriculum requires a complex set of skills. According to Botma (2014: 26) the complex set of skills required for a CBC relies on educators having the ability to engage in SDL.

5.1 IMPLICATIONS OF RESULTS OBTAINED THROUGH THE PRO-SDLS

The results of the study showed a balance of the younger and older age groups of educators. This implied that experienced educators could transfer the legacy of knowledge and skills successfully to the young and less experienced ones who still have more years in service. The retirement age for the Lesotho government is 60 years and 65 years for CHAL.

Some educators (30.6%, n=19) were teaching both content and a competency-based curriculum which might be difficult for them to be effective in facilitating both approaches. This, therefore, could forfeit the purpose of having started a new mode of curriculum delivery.

Most educators (72.6%, n=45) seemed to prefer a competency-based curriculum opposed to a content-based approach. However, despite this preference more support

and capacity building are required to ensure optimal functioning in a competency-based curriculum.

Determining the SD and SDL of nurse and midwifery educators were fundamental to this study. Educators SDL (82.40%) was found to be excellent, this was brought by an average of the median. Refer to Table 5.1.

Table 5.1 Means and medians on levels of SD

Central tendency	Initiative	Locus of Control	Self-efficacy	Motivation
Mean	85.99%	80.69%	84.3%	74.69%
Median	88.06%	79.67%	84.35%	77.55%

An analysis of the open-ended questions provided a broader understanding on levels of SD and SDL. One could assume that a lack of resources, competing activities with planning innovative teaching and learning strategies, and time constraints in class might have contributed negatively to the score, but it was not the case.

The observation was that a competency-based curriculum was really appreciated by educators. However, some educators felt they need some capacity building towards implementing a competency-based curriculum. The findings of the study were aligned with those of Komba and Mwandanji (2015: 74), who stated that Tanzanian pre-service teachers needed some kind of practices with competency-based teaching approaches in order to be effectively implementing the appropriate approaches for a competency-based curriculum.

Some educators (3.2%, n=2) felt that there is no difference between the previous content-based curriculum and a competency-based curriculum, claiming that a competency-based curriculum has been implemented long time ago in Lesotho NTIs. Komba and Mwandanji (2015: 75) contend that educators are the cornerstone of implementation of any educational initiative in nursing. In Tanzania it was observed that majority of educators did not know what the objectives of a competency-based curriculum were, and that led to poor implementation of the strategy.

An excellent level of SDL (82.40%) of educators' motivation was found to be promising for the proper implementation and sustainability of the new curriculum. However, support in areas mentioned by respondents such as; resources in areas of technical support in the form of capacity building, proper allocation of time amongst activities to afford educators time for new innovations in teaching and learning.

Some nurse educators (45.0%, n=28) were able to identify teaching and learning resources for successful implementation of a competency-based curriculum.

5.2 GAPS REMAINING AND/OR LIMITATION

The aim of the study was not to compare SD and SDL amongst the different institutions, or to determine whether resources were appropriately invested to support a competency-based curriculum implementation.

The fact that change over time was not documented in this study could be considered a disadvantage (De Vos *et al.*, 2011: 66). To address this disadvantage future research should determine if there had been any change in level of SD within the context of this study population.

5.3 RECOMMENDATIONS ARISING FROM THE STUDY

In Lesotho, no study that describes SD and/or SDL of nurse and midwifery educators in the NTIs has been conducted. The NTIs could benefit by the results of the current study if they:

- Advocate for the necessary resources that is, material, human and fiscal resources that could support SDL in nurse educators. NTIs should address the issue of SD and SDL through a variety of strategies such as discussions, online resources, the input of guest speakers and workshops. Nurse educators should specifically be sensitised on how SDL is developed and maintained before

implementing a competency-based curriculum or any other curriculum. Furthermore, the researcher recommends that effective time management strategies be introduced to educators and considered a crucial part of SDL (Candy, 1991: 420; Van Rensburg & Botma, 2015: 3).

- Appoint and/or allocate nurse educators that are self-directed to implement and sustain competency-based curricula. This strategy might over time, prevent nurse educators to drift back to traditional teaching and learning methods.

The researcher also identified the need for NTIs to:

- Determine the possibility of curriculum drift based on the findings that 3.2% (n=2) aired that there was no need for orientation because a competency-based curriculum and content based are not different.
- Increase follow-up by stakeholders to ensure that educators implement CBC. Continuous support is also required for trained, nurse practitioners with varied skills such as SD, and especially for those entering the profession.
- Solve the lack of lifelong learning among professionals (Osmani, 2013: 956; Petty, 2011: 162). In Lesotho in areas that are hard to reach and where other healthprofessionals are scarce, proficient nurses would not only provide improved services, but would also contribute to the overall reputation of the profession.

The recommendations as well as findings of this study should be shared with nurse educators and clinical staff responsible for student training.

5.4 SUMMARY

The study provided baseline information on the description of the educators' SDL. It gave a researcher an opportunity to use an appropriate scale to determine educators' levels of SD and SDL. The educators were awarded a chance to describe the context

of their teaching and learning. These enabled recommendations to be made to improve the current situation in their teaching and learning environment as well as the development of SDL. The researcher, through the rigorous implementation of the research process, was able to address the aim and objectives of the study by embedding the study in Brockett and Hiemstra's (1991) conceptual framework for understanding SD in adult learning and Stockdale and Brockett's (2011) PRO-SDLS that measured self-direction in learning based on the PRO-model.

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ANNEXURES

A. HEALTH SCIENCES RESEARCH ETHICS COMMITTEE LETTER

B. LETTERS OF CONSENT: STAKEHOLDERS (AMENDED TOPIC)

C. PARTICIPANT INFORMATION LEAFLET

D. PARTICIPANT INFORMED CONSENT

E. QUESTIONNAIRE BY STOCKDALE AND BROCKETT, 2011

F. QUESTIONNAIRE USED IN THIS STUDY

G. LETTER FROM LANGUAGE EDITOR

A. HEALTH SCIENCES RESEARCH ETHICS COMMITTEE LETTER

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

UFS·UV
HEALTH SCIENCES
GESONDHEIDSWETENSKAPPE

IRB nr 00006240
REC Reference nr 230408-011
IORG0005187
FWA00012784

08 November 2017

MS R RAMOKHITLI
SCHOOL OF NURSING
IDAHLIA VENTER BUILDING
UFS

Dear Ms R Ramokhitli

ECUFS NR 196/2015
MS J RAMOKHITLI
SCHOOL OF NURSING
PROJECT TITLE: A DESCRIPTION OF NURSE AND MIDWIFERY EDUCATORS' SELF-DIRECTION IN LEARNING IN LESOTHO

With reference to the letter dated 19 October 2015, this letter replaces the aforementioned letter.

1. You are hereby kindly informed that, at the meeting held on 15 October 2015, the Ethics Committee approved the above project.

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

3. A progress report should be submitted within one year of approval of long term studies and a final report at completion of both short term and long term studies.

4. Kindly use the ECUFS NR as reference in correspondence to the Ethics Committee Secretariat.

5. The Ethics Committee 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 Ethics Committee of the Faculty of Health Sciences.

Yours faithfully

DR SM LE GRANGE
CHAIR: HEALTH SCIENCES RESEARCH ETHICS COMMITTEE

Cc: Prof A Joubert

Health Sciences Research Ethics Committee
Office of the Dean: Health Sciences
T: +27 (0)51 401 7795/7794 | E: ethicsfhs@ufs.ac.za
Block D, Dean's Division, Room D104 | P.O. Box/Posbus 339 (Internal Post Box G40) | Bloemfontein 9300 | South Africa
www.ufs.ac.za

B. LETTERS OF CONSENT: STAKEHOLDERS

* Please note that the title of the study was amended with the ethics committee after stakeholder approval was obtained.

LESOTHO

Ministry of Health
PO Box 514
Maseru 100

November 11, 2015

Maseisa Jane Ramokhiti
M Soc Sc Nursing candidate
School of Nursing
University of Free State, SA

Dear Ms. M. Jane,

Re: Self-direction in learning: A description of nurse and midwifery educators' in Lesotho (ID82-2015)

Thank you for submitting the above mentioned proposal. The Ministry of Health Research and Ethics Committee having reviewed your protocol hereby decides that it has the criteria "The research is the conducted in commonly accepted educational settings involving normal educational practices". **The committee exempts the proposal from research and ethics review** and authorizes you to conduct the study with the understanding that you agree on the following rules:

- In the event of changes in material or design or execution of the activity, the Research and Ethics Committee must be consulted through the Research Coordination Unit, MOH.
- The study is conducted among the specified population.
- The study protocol will be followed as stated. Departure from the stipulated protocol will constitute a breach of the permission.

We are looking forward to have a progress report and final report at the end of your study.

Sincerely,

Dr. Nyane Letsie
Director General Health Services

Dr. Jill Sanders
Co-chairperson
National Health Research Ethics Committee (NH-REC)

LESOTHO

Ministry of Health
PO Box 514
Maseru 100

November 11, 2015

Maseisa Jane Ramokhiti
M Soc Sc Nursing candidate
School of Nursing
University of Free State, SA

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Sincerely,

Dr. Nyane Letsie
Director General Health Services

Dr. Jill Sanders
Co-chairperson
National Health Research Ethics Committee (NH-REC)

Ramashamole
Deputy Executive Director
Study approved

CHRISTIAN HEALTH ASSOCIATION OF LESOTHO P.O. BOX 1632 MASERU 100
2016 -03- 18
FAX: 22310314
PH: 22312500

LESOTHO

Ministry of Health
PO Box 514
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November 11, 2015

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- The study is conducted among the specified population.
- The study protocol will be followed as stated. Departure from the stipulated protocol will constitute a breach of the permission.

We are looking forward to have a progress report and final report at the end of your study.

Sincerely,

Dr. Nyane Letsie
Director General Health Services

Dr. Jill Sanders
Co-chairperson
National Health Research Ethics Committee (NH-REC)

Permission to pilot the research tool has been granted to M.M.J. Ramokhiti.
(Manthaelo Qhobela - HoD - Nursing NUL
23/03/2016.

NATIONAL UNIVERSITY OF LESOTHO
23 MAR 2016
DEPARTMENT OF NURSING

LESOTHO

Ministry of Health
PO Box 514
Maseru 100

November 11, 2015

Maseisa Jane Ramokhiti
M Soc Sc Nursing candidate
School of Nursing
University of Free State, SA

Dear Ms. M. Jane,

Re: Self-direction in learning: A description of nurse and midwifery educators' in Lesotho (ID82-2015)

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Director General Health Services

Dr. Jill Sanders
Co-chairperson
National Health Research Ethics Committee (NH-REC)

Approved

MINISTRY OF HEALTH
N.H.R.E.C.
2016 -04- 19
DIRECTOR ACADEMIC
MASERU 100, LESOTHO

Director Academic

LESOTHO

Ministry of Health
PO Box 514
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November 11, 2015

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Sincerely,

Dr. Nyane Letsie
Director General Health Services

Dr. Jill Sanders
Co-chairperson
National Health Research Ethics Committee (NH-REC)

Approved

MALUTI ADVENTIST COLLEGE
RECTOR
2016 -06- 22
P.O. Box 11, Mapoteng 250
Tel: 22 540 211
Fax: 22 540 230

Rector

LESOTHO

Ministry of Health
PO Box 514
Maseru 100

November 11, 2015

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M Soc Sc Nursing candidate
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University of Free State, SA

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Sincerely,

Dr. Nyane Letsie
Director General Health Services

Dr. Jill Sanders
Co-chairperson
National Health Research Ethics Committee (NH-REC)

The request has been approved by [illegible].
Principal Nurse Educator
Roma College of Nursing

COLLEGE OF NURSING
2016 -04- 21
Tel: 22340486
Cell: 59400414
P.O. Box 26, Roma 180

LESOTHO

Ministry of Health
PO Box 514
Maseru 100

November 11, 2015

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M Soc Sc Nursing candidate
School of Nursing
University of Free State, SA

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Dr. Nyane Letsie
Director General Health Services

Dr. Jill Sanders
Co-chairperson
National Health Research Ethics Committee (NH-REC)

Approved.
M. Ramphoma.
PNC
19. April 2016.

19 APR 2016
SCHOOL OF NURSING

LESOTHO

Ministry of Health
PO Box 514
Maseru 100

November 11, 2015

Maseisa Jane Ramokhiti
M Soc Sc Nursing candidate
School of Nursing
University of Free State, SA

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Sincerely,

Dr. Nyane Letsie
Director General Health Services

Dr. Jill Sanders
Co-chairperson
National Health Research Ethics Committee (NH-REC)

Approved 22/04/2016
Principal Nurse Educator

PARAY SCHOOL OF NURSING
P.O. Box 2
THABA - TSEKA 560
PHONE 22900319 - 27032166

C. PARTICIPANT INFORMATION LEAFLET

SELF-DIRECTION IN LEARNING: A DESCRIPTION OF NURSE AND MIDWIFERY EDUCATORS' IN LESOTHO

Greetings:

I, Maseisa Jane Ramokhitli is doing research on the self-direction in learning of Nurse and Midwifery Educators in Lesotho.

Invitation to participate: I am inviting you to participate in the research study

What is involved in the study – The study will be quantitative, descriptive in nature. The research technique will include a self-directedness in learning questionnaire that is based on a selected self-directedness in learning (adopted PRO-SDLS) model. You will be requested to indicate your answers on the questionnaire at a time and place arranged by the researcher. To complete the questionnaire should not take more than 30 minutes of your time. Thereafter, the completed questionnaire will be collected according to the agreement between you and the researcher. Your responsibility towards the researcher will end at completion of the questionnaire.

Risks of being involved in the study: There is no risk involved in the study. You will be asked to complete a questionnaire.

Benefits of being in the study are that information gathered will be communicated to the different Nursing Training Institutions in Lesotho as well as the Ministry of Health. The information can improve nursing education in Lesotho.

Participation is voluntary, and refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled to; you may discontinue participation at any time.

You will not be paid for your participation in the study. No costs will be payable by you either.

Confidentiality: To ensure confidentiality your personal information will not appear on the questionnaire, in the description of results, or in any document where results will be disseminated.
Organizations that may inspect and/or copy your research records for quality assurance and data analysis includes groups such as the Ethics Committee for Medical Research and the Medicines Control Council *(where appropriate)*. Results will not be published by person, but by group.

Contact details of researcher(s) – for further information you may contact Maseisa Jane Ramokhitli at janeramokhitli@rocketmail.com. or +266 63480885. **Contact details of Secretariat and Chair: Ethics Committee of the Faculty of Health Sciences, University of the Free State** – for reporting of complaints/problems: Telephone number +2751 4052812

D. PARTICIPANT INFORMED CONSENT

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

UFS UV

School of Nursing
Nelson Mandela Avenue |
P.O. Box 339 |
Bloemfontein,| 9300 | RSA
tel: +2751 401 9111
www.ufs.ac.za

CONSENT FORM
SELF DIRECTION IN LEARNING: A DESCRIPTION OF NURSE AND MIDWIFERY EDUCATORS' IN LESOTHO

You have been asked to participate in a research study. Before you decide whether to take part, here is what it involves.

- The researcher is doing research to understand the self-direction in learning of Nurse and Midwifery Educators in Lesotho. The data we obtain will be used to improve nursing education.
- The information will be obtained through a self-administered questionnaire.
- You are requested not to discuss your answers with any of your colleagues to prevent that you influence each other's answers.
- Your participation in this research is voluntary, and you will not be penalized or lose benefits if you refuse to participate or decide to terminate participation.
- You will not receive any compensation/ payment for participating in the study.
- If you agree to participate, you will be given a signed copy of this document.
- You are free to stop taking part in the study at any time without it affecting future benefits.
- The answers you provide will remain confidential and will not be viewed by any persons or parties not involved in this study. Information will be reported by group, not by individual.
- Should you require any additional information concerning this study, you may contact the researcher, Maseisa Jane Ramokhitli at janeramokhitli@rocketmail.com or +266 63480885 if you have questions/ feedback regarding the research.
- You may contact the Secretariat of the Ethics Committee of the Faculty of Health Sciences, UFS at telephone number +2751 405 2812 if you have questions about your rights as a research subject.

You have been informed about the study by ....

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

_____ _____
Signature of Participant Date

_____ _____
Signature of Witness/Guardian *(Where applicable)* Date

E. QUESTIONNAIRE BY STOCKDALE AND BROCKETT, 2011

SCORING A Learning Experience Scale (PRO-SDLS)

Please check one answer for each statement. There are no "right" answers to these statements, which pertain to your recent learning experiences in college-not just those experiences from this class (although they may be the same).

ITEM	Strongly Disagree	Disagree	Sometimes	Agree	Strongly Agree
1. I am confident in my ability to consistently motivate myself.	1	2	3	4	5
2. I frequently do extra work in a course just because I am interested.	1	2	3	4	5
3. I don't see any connection between the work I do for my courses and my personal goals and interests.	5	4	3	2	1
4. If I am not doing as well as I would like in a course, I always independently make the changes necessary for improvement.	1	2	3	4	5
5. I always effectively take responsibility for my own learning.	1	2	3	4	5
6. I often have a problem motivating myself to learn.	5	4	3	2	1
7. I am very confident in my ability to independently prioritize my learning goals.	1	2	3	4	5
8. I complete most of my college activities because I WANT to, not because I HAVE to.	1	2	3	4	5
9. I would rather take the initiative to learn new things in a course rather than wait for the instructor to foster new learning.	1	2	3	4	5
10. I often use materials I've found on my own to help me in a course.	1	2	3	4	5
11. For most of my classes, I really don't know why I complete the work I do.	5	4	3	2	1
12. I am very convinced I have the ability to take personal control of my learning.	1	2	3	4	5
13. I usually struggle in classes if the professor allows me to set my own timetable for work completion.	5	4	3	2	1
14. Most of the work I do in my courses is personally enjoyable or seems relevant to my reasons for attending college.	1	2	3	4	5
15. Even after a course is over, I continue to spend time learning about the topic.	1	2	3	4	5
16. The primary reason I complete course requirements is to obtain the grade that is	5	4	3	2	1

ITEM	Strongly Disagree	Disagree	Sometimes	Agree	Strongly Agree
17. I often collect additional information about interesting topics even after the course has ended.	1	2	3	4	5
18. The main reason I do the course activities is to avoid feeling guilty or getting a bad grade.	5	4	3	2	1
19. I am very successful at prioritizing my learning goals.	1	2	3	4	5
20. Most of the activities I complete for my college classes are NOT really personally useful or interesting.	5	4	3	2	1
21. I am really uncertain about my capacity to take primary responsibility for my learning.	5	4	3	2	1
22. I am unsure about my ability to independently find needed outside materials for my courses.	5	4	3	2	1
23. I always effectively organize my study time.	1	2	3	4	5
24. I don't have much confidence in my ability to independently carry out my student plans.	5	4	3	2	1
25. I always rely on the instructor to tell me what I need to do in the course to succeed.	5	4	3	2	1

TOTAL SCORE =

Teaching Learning Transaction Component = Total of Imitative and Control Factors from below

Factors:
Initiative = Total of scores from numbers 2,9,10,15,17,25
Control = Total of scores from numbers 4, 5, 6,13,19,23

Learner Characteristics Component = Total of Self-efficacy and Motivation Factors from below
Factors:
Self-Efficacy = Total of scores from 1,7,12,21,22,24
Motivation = Total of scores from 3, 8, 11, 14,16,18,20

F. QUESTIONNAIRE USED IN THIS STUDY

Dear respondent

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 confidentially at all times. You may withdraw from this study at any given moment during the completion of the questionnaire. The results of the study might be published.

Kindly give feedback regarding the following information. Make sure that you indicate your answers for each of the questions or statements provided. It is also very important that you are honest with regard to the information you provide.

A: DEMOGRAPHIC DATA

Please indicate your answer by checking [X] the appropriate box:

No	Item	Response								Official use	
1	Gender	Female			1	Male			2		
2	Age group	25-35	1	36-45	2	46-55	3	56+	4		
3	Ethnic group	Specify									
4	Highest qualification	Diploma	1	BSc	2	MSc	3	PhD	4		
5	Years of experience: Teaching	0-5	1	6-10	2	11-15	3	16+	4		
6	Curriculum currently involved in	Competency-based			1	Content-based			2		
7	Months involved in this curriculum	0-6	1	7-12	2	13-18	3	18+	4		
8	The type of curriculum you prefer	Competency-based			1	Content-based			2		

B: STATEMENTS RELATED TO TEACHING AND LEARNING

Please check [X] one answer for each statement. There are no "right" answers to these statements, which pertain to your recent teaching and learning experiences in a nursing training institution.

Please note: The concepts [teaching and learning] or [teach and learn] in this questionnaire refer to experiences that are interrelated, and therefore not easily separated.

Thank you very much for your participation

#	Item	Strongly disagree	Disagree	Sometimes	Agree	Strongly agree	Office use	
1	I am confident in my ability to consistently motivate myself	1	2	3	4	5		
2	I frequently do extra work regarding the course I facilitate just because I am interested	1	2	3	4	5		
3	I do not see any connection between the work I do and my personal goals and interests	1	2	3	4	5		
4	If my students are not doing as well as I would like in a course, I always independently make changes necessary for improvement	1	2	3	4	5		
5	I always effectively take responsibility for my own teaching and learning	1	2	3	4	5		
6.1	I often have a problem motivating myself to update my knowledge	1	2	3	4	5		
6.2	I often have a problem to find time to update my knowledge	1	2	3	4	5		
7	I am very confident in my ability to independently prioritise my teaching and learning goals	1	2	3	4	5		
8	I complete most of my work-related activities because I want to, not because I have to	1	2	3	4	5		
9	I would rather take the initiative to learn new things rather than wait for my superior to initiate new teaching approaches and the learning it requires	1	2	3	4	5		
10.1	I often use materials I have found on my own to help me with the courses I facilitate	1	2	3	4	5		
10.2	I have the means to find new materials on my own to help me with the courses I facilitate	1	2	3	4	5		
11	For the course I facilitate, I really do not know why I have to include certain content I have to	1	2	3	4	5		
12	I am very convinced that I have the ability to take personal control of my teaching and learning activities	1	2	3	4	5		
13	I usually struggle at work to manage time to complete competing tasks	1	2	3	4	5		
14	Most of the work I do in my courses is personally enjoyable	1	2	3	4	5		
15	Most of the work I do seems relevant to reasons for doing it	1	2	3	4	5		
16	Even after facilitating a course, I continue to spend time reading about the topic to get a broader perspective	1	2	3	4	5		
17	The primary reason I adhere to course requirements is to assist students to obtain the outcomes expected of them	1	2	3	4	5		
18	I often collect additional information about interesting topics even after the course has ended	1	2	3	4	5		
19.1	The main reason why I do the course activities is to avoid feeling guilty	1	2	3	4	5		
19.2	The main reason why I use innovative teaching approaches is to avoid a low score on the performance management system	1	2	3	4	5		
20	I am very successful in prioritising my teaching and learning goals	1	2	3	4	5		
21	Most of the activities I complete for my work are not really personally useful	1	2	3	4	5		
22	Most of the activities I complete for the course I facilitate are nor really personally interesting	1	2	3	4	5		
23	I am really uncertain about my capacity to take primary responsibility for implementing the proposed curriculum changes	1	2	3	4	5		
24	I am unsure about my ability to independently find needed outside materials for the course I facilitate	1	2	3	4	5		
25	I always effectively organise my teaching and learning time	1	2	3	4	5		

26	I do not have much confidence in my ability to independently carry out proposed curriculum changes	1	2	3	4	5		
27	I always rely on the a superior to tell me what I need to do in the course I facilitate	1	2	3	4	5		

C: CONTEXT

Please answer the following questions in the space provided:

1. Please indicate the type of orientation you received to implement a competency-based curriculum.

2. Please indicate any activities that compete with your time to engage in gathering new knowledge or plan new innovative teaching strategies during working hours.

3. Please indicate any activities that compete with your time to engage in gathering new knowledge or plan new innovative teaching strategies after working hours.

4. Is there anything else you would like to add related to your teaching and learning.

Thank you very much for your participation

For official use

Institution code

Questionnaire number

G. LETTER FROM LANGUAGE EDITOR

Jackie Viljoen
Language Editor and Translator
16 Bergzicht Gardens
Fijnbos Close
STRAND 7140

Accredited member of the South African Translators' Institute
No APSTrans 1000017
Member of the Professional Editors' Group (PEG)

☎ +27+21-854 5095 082 783 0263 086 585 3740
Postal address: 16 Bergzicht Gardens, Fijnbos Close, STRAND 7140 South Africa

DECLARATION

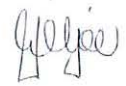
I hereby certify that the thesis by **MASEISA JANE RAMOKHITLI** was properly language edited but without viewing the final version.

The track changes function was used and the author was responsible for accepting the editor's changes and for finalising the reference list.

Title of thesis:

A DESCRIPTION OF NURSE AND MIDWIFERY EDUCATORS' SELF-DIRECTION IN LEARNING IN LESOTHO

The editor did not write or rewrite any part of the thesis on behalf of the client, including passages that may have been plagiarised. The academic content is the sole responsibility of the client as author of the work. The editor could not and did not test definitively for plagiarism, nor is there any explicit or implicit guarantee that the content that was edited contained no material used without consent. The editor accepts no responsibility for any failure on examination of the thesis by the university.



JACKIE VILJOEN
Strand
South Africa
11 February 2018