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**IDENTIFICATION OF INFORMATION AND FACTORS INFLUENCING GRADE 12
LEARNERS' CHOICE OF NURSING AS A CAREER IN THE TSHWANE NORTH
DISTRICT SCHOOLS**

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DECLARATION

I declare that the study entitled "IDENTIFICATION OF INFORMATION AND FACTORS INFLUENCING GRADE 12 LEARNERS' CHOICE OF NURSING AS A CAREER IN THE TSHWANE NORTH DISTRICT SCHOOLS" is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Signature: _____

ML Moseitlhe

Date: _____

DEDICATION

I dedicate this study to my daughters Duduetsang and Olebogeng and my son Letlotlo for their understanding, support and patience throughout my years of study.

A special dedication to my late husband Sydney Ramolepe Mosetlhe for believing in me, how I wish he could have lived to share this achievement.

To my mother Rosalia Maesi Segone for her overwhelming faith, support and encouragement in all my endeavours.

ACKNOWLEDGEMENTS

Firstly, I need to give thanks to my Creator, who has granted me the strength and perseverance to complete my dissertation.

My sincere thanks and gratitude are extended to the following people:

- To my Almighty God for being with me throughout my studies.
- The Gauteng Department of Education and Tshwane North District for giving me permission to use schools for this study.
- Gauteng Department of Health and SG Lourens Nursing College for granting me the permission to study.
- To the Principals, teachers, learners of participating schools for their cooperation in the completion of research questionnaires.
- To Ms Cynthia Ngwane from Agricultural Research Council for assistance with the statistical processing of data used in this study.
- My wonderful children, Duduetsang, Letlotlo and Olebogeng for missing my full attention during the difficult times of this study.
- My mother, Rosalia Maesi Segone for her endless love, support and prayers throughout my life and managed to put me through education with her limited income. She deserves my sincerest gratitude.
- Mrs AN Xaba for her encouragement and understanding who was a pillar of strength during the difficult times of this study.
- My study companions Ms MP Tjale and Ms GTM Motswasele for going through the challenges of this study together, their encouragements was exceptionally great. We laughed and cried together during this journey, it was worthwhile.

ABSTRACT

Introduction: The majority of learners until Grade 12 lack adequate information about nursing as a career. Fewer learners select nursing as a career whilst in Grade 12; as evidenced by the intake of student nurses from various nursing colleges around South Africa. The provision of career choice information, career development and career counselling services in South Africa are still fragmented.

This study will assist in identifying information provided to Grade 12 learners on nursing as a career and factors influencing their choice of nursing as a career in the Tshwane North district schools in Gauteng province, South Africa.

Aim/Objective: The aim of the study was to identify information and factors influencing Grade 12 learners' choice of nursing as a career in the Tshwane North district schools, Gauteng province in South Africa.

Methods and procedures: Descriptive quantitative design and survey method was followed to determine and describe the information given to Grade 12 learners on nursing as a career and factors influencing the choice of nursing as a career amongst Grade 12 learners in the Tshwane North district schools. The study population was ± 7000 Grade 12 learners from 36 high schools in the Tshwane North district within Gauteng province in South Africa. Tshwane North district is divided into four clusters. Two schools from each cluster were randomly selected by means of systematic random sampling in order to have equal representatives. A self-administered questionnaire that focused on information provided on nursing as a career and factors influencing choice of nursing as a career was administered to 362 selected Grade 12 learners from the selected eight schools to generate data for this study. Data was analysed by means of descriptive and inference statistics.

Findings: The study revealed the provision of inadequate information about nursing career to Grade 12 learners from various sources and that learners reached Grade 12 with no information provided about nursing as a career. Though some learners were provided with

information, they still had limited knowledge about a career in nursing. Parents mostly influenced the career choice, more so than Teachers and media. Some learners who chose a nursing career were influenced by the fact that their parents could not afford tertiary fees.

Conclusion: The findings revealed that parents, Nursing Education Institutions (NEIs) and Life Orientation Teachers provided learners with adequate information on nursing as a career in the Tshwane North district schools.

Key words: Career, Nursing, Grade 12 learners, Information.

TABLE OF CONTENTS

TABLE OF CONTENTS

CHAPTER 1 ORIENTATION OF THE STUDY	1
1.1 INTRODUCTION AND BACKGROUND	1
1.2 PROBLEM STATEMENT	2
1.3 RESEARCH QUESTIONS, AIM AND OBJECTIVES	4
1.3.1 Aim	4
1.3.2 Objectives.....	4
1.4 DEFINITION OF KEY TERMS	5
1.5 PARADIGM AND ASSUMPTIONS	6
1.5.1 Paradigm.....	6
1.6 DELIMITATIONS AND ASSUMPTIONS	6
1.6.1 Delimitations.....	6
1.6.2 Assumption	7
1.6.2.1 Ontological assumptions.....	7
1.6.2.2 Epistemological assumptions.....	7
1.6.2.3 Methodological assumptions.....	7
1.7 RESEARCH DESIGN AND METHODS	8
1.8 IMPORTANCE AND BENEFITS OF THE PROPOSED STUDY	8
1.9 ETHICAL AND LEGAL CONSIDERATIONS	9
1.9.1 Informed consent	9
1.9.2 Confidentiality.....	9
1.9.3 Beneficence	9
1.9.4 Autonomy.....	10
1.9.5 Justice.....	10
1.10 CONCLUSION	10
CHAPTER 2 LITERATURE REVIEW	11
2.1 INTRODUCTION	11
2.2 INFORMATION ON NURSING AS A CAREER PROVIDED TO HIGH SCHOOL LEARNERS	12
2.2.1 Department of Basic Education's role	12
2.2.2 Information provided by nurses	15
2.2.3 Information from parents and other sources	17
2.2.4 Adequacy of the information provided	17
2.3 FACTORS THAT INFLUENCE THE CHOICE OF NURSING AS A CAREER AMONGST LEARNERS	18
2.3.1 Some negativity towards nursing.....	19
2.3.1.1 Significant others	19
2.3.1.2 Academic achievement and grades	20
2.3.2 Image of nurses and desire to care	21
2.3.3 Working environment and conditions of nurses.....	21
2.4 CONCLUSION	22
CHAPTER 3 METHODOLOGY.....	24
3.1 INTRODUCTION	24
3.2 STUDY DESIGN	24
3.2.1 Quantitative design.....	25
3.3 RESEARCH SETTING.....	25
3.4 RESEARCH POPULATION AND SAMPLING	27
3.4.1 Population.....	27
3.4.2 Sample	27

3.4.2.1	Sample size determination	27
3.4.2.2	Sampling	28
3.4.2.3	Inclusion criteria	32
3.4.2.4	Exclusion criteria	32
3.5	DATA COLLECTION	32
3.5.1	<i>Data collection tool/measurement tools</i>	34
3.5.2	<i>Quality Control</i>	34
3.5.2.1	Reliability	34
3.5.2.2	Validity	35
3.6	PILOT STUDY	36
3.7	DATA ANALYSIS	36
3.8	CONCLUSION	38
CHAPTER 4 PRESENTATION OF RESULTS		39
4.1	INTRODUCTION	39
4.2	DEMOGRAPHIC ANALYSIS	39
4.2.1	<i>Schools distribution</i>	39
4.2.2	<i>Age distribution</i>	41
4.2.3	<i>Gender of respondents</i>	43
4.2.4	<i>Race Distribution</i>	44
4.2.5	<i>Parents' occupation</i>	46
4.2.6	<i>Area where respondents live</i>	47
4.3	INFORMATION PROVIDED TO THE LEARNERS ABOUT THE NURSING CAREER	49
4.3.1	<i>Learners who have received information on nursing</i>	49
4.3.2	<i>When was the information received?</i>	50
4.3.3	<i>Source of information</i>	51
4.3.4	<i>Informed about subject choice</i>	52
4.3.5	<i>Adequacy of information given</i>	53
4.3.6	<i>Category of nurses</i>	54
4.3.7	<i>Duration of training to become a professional nurse</i>	55
4.3.8	<i>Nurses as independent practitioners</i>	56
4.3.9	<i>Nurses work under the supervision of doctor</i>	57
4.3.10	<i>Where nurses can work</i>	58
4.3.11	<i>Where can nurses train?</i>	59
4.4	FACTORS INFLUENCING CAREER CHOICE	61
4.4.1	<i>Information on nursing career and career choice</i>	62
4.4.2	<i>Influence by parents, teachers and the media</i>	63
4.4.3	<i>Socio-economic influence</i>	64
4.4.4	<i>Other factors related to the choice of nursing career</i>	65
4.4.4.1	Nursing is my 1st choice	66
4.4.4.2	Have passion of taking care of sick	66
4.4.4.3	Nursing is a noble profession	66
4.4.5	<i>Image of nurses, the working environment and conditions</i>	67
4.4.5.1	Nurses' attitude and how they are regarded by some community	67
4.4.5.2	Nurses' are adequately paid	68
4.4.5.3	Nurses work long hours, work hard and are short staffed	69
4.4.5.4	Nurses are exposed to many infectious diseases	69
4.5	CONCLUSION	69
CHAPTER 5 DISCUSSION, RECOMMENDATIONS AND CONCLUSION		71
5.1	INTRODUCTION	71
5.2	SUMMARY OF THE MAIN FINDINGS	72
5.2.1	<i>Role of the Department of Education</i>	72
5.2.2	<i>Information provided by nurses</i>	72
5.2.3	<i>Information from parents and other sources</i>	73
5.2.4	<i>Adequacy of information provided</i>	73

5.2.5	<i>Withholding of information</i>	74
5.2.6	<i>Image of nurses</i>	74
5.2.7	<i>Working environment and conditions of nursing</i>	75
5.2.8	<i>Major factors influencing the career choice</i>	75
5.3	LIMITATION OF THE STUDY	75
5.4	RECOMMENDATIONS	76
5.4.1	<i>Department of Education (Schools) and Department of Health (NEI)</i>	76
5.4.2	<i>Future research</i>	77
5.5	CONCLUSION	77
BIBLIOGRAPHY		79
LIST OF ANNEXURES		88

LIST OF FIGURES

Figure 3-1 Map of Gauteng Department of Education Districts.....	26
Figure 3-2 Tshwane North Districts High Schools.....	30
Figure 4-1 Schools that participated in the study.....	40
Figure 4-2 Ages of Respondents.....	41
Figure 4-3 Gender of Respondents.....	43
Figure 4-4 Race of Respondents.....	45
Figure 4-5 Fathers' Occupations.....	46
Figure 4-6 Mothers' Occupations.....	47
Figure 4-7 Area where respondents live.....	48
Figure 4-8 Respondents who received information on nursing career.....	49
Figure 4-9 Years when information was received.....	50
Figure 4-10 Source of nursing information.....	51
Figure 4-11 Respondents who received information on relevant subjects.....	52
Figure 4-12 Adequacy of information received.....	53
Figure 4-13 Categories of nursing knowledge.....	54
Figure 4-14 Duration of professional nurse training.....	55
Figure 4-15 Nurses as independent practitioners.....	56
Figure 4-16 Nurses work under the supervision of doctors.....	57
Figure 4-17 University as a place of work for nurses.....	58
Figure 4-18 Industries as a place of work for nurses.....	59
Figure 4-19 Where nurses can train by all learners.....	59
Figure 4-20 Institutions where nurses can train.....	60
Figure 4-21 Respondents who may consider nursing career.....	61
Figure 4-22 Nursing as the first choice career.....	61
Figure 4-23 Choice of nursing among learners who received information on nursing career. 62	
Figure 4-24 Reasons for the choice of nursing.....	Error! Bookmark not defined.
Figure 4-25 Influence by parents, teachers and media.....	64
Figure 4-26 Major reasons for the choice of nursing career.....	65
Figure 4-27 Nurses not highly regarded by some communities.....	67
Figure 4-28 Some nurses have a bad attitude.....	68
Figure 4-29 Learners at the centre of Parents, LO Teachers and NEIs in the choice of nursing career.....	70

LIST OF TABLES

Table 1-1 Student nurses registered at a nursing College 2013 - 2015	3
Table 3-1 Sampling frame for Schools	31
Table 3-2 Questionnaire coding	37
Table 4-1 Association between schools and nursing career choice	40
Table 4-2 Super's Life Span and Developmental stages.....	42
Table 4-3 Association between age and nursing career choice	42
Table 4-4 Association between gender and nursing choice	44
Table 4-5 SANC distribution of manpower in Gauteng province as at 31 December 2015	44
Table 4-6 Association between race and nursing career choice	45
Table 4-7 Association between area and nursing career choice	49
Table 4-8 Other factors related to the choice of nursing career.....	66
Table 4-9 Image of nursing, woking environment and conditions.....	68

LIST OF ANNEXURES

ANNEXURE A.....	88
ANNEXURE B	89
ANNEXURE C	93
ANNEXTURE D	103
ANNEXTURE E	104
ANNEXTURE F	105
ANNEXTURE G.....	107

ABBREVIATIONS

Abbreviation	Meaning
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
FET	Further Education and Training
GDoH	Gauteng Department of Health
HEI	Higher Education Institution
HIV/AIDS	Human immunodeficiency virus/Acquired immunodeficiency syndrome
LO	Life Orientation
NDoH	National Department of Health
NEI	Nursing Education Institution
NGO	Non-governmental organisations
NSFAS	National Student Financial Aid Scheme
SANC	South African Nursing Council
SAQA	South African Qualification Authority
StatsSA	Statistics South Africa

CHAPTER 1

ORIENTATION OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND

To ensure that high school learners are informed about career mix and are prepared to make informed choices, the DBE introduced the Life Orientation (LO) subject at schools with the aim of providing information to learners on different careers, this would enable learners to make informed decisions about career choices at the end of Grade 12, including nursing as a career (DHET, 2012:5). The provision of career choice information, career development and career counselling services in South Africa are still fragmented in terms of how it is organised and managed (Department of Higher Education and Training (DHET), 2012:1). The Department of Basic Education (DBE) has included among its priorities the introduction of career information during high school years so that every learner receives career information and guidance by the end of Grade 12 (DHET, 2012:5).

Even though nursing as a career is included during information provision on career choices, the applications by Grade 12 learners for nursing is observed to be low. Dante, Rizzi, Landerca and Palese (2013:129) assert that there are factors that influence the choice of nursing career among the Grade 12 learners. Dante et al.,(2013:131) confirmed that among other factors leading to low numbers of Grade 12 applying for nursing career are: learners are not aware of the career progression for nurses and the provision of inaccurate information about nursing. Mbangi (2014:60) affirms that high school learners do not have knowledge of nursing as a career, they are unaware of the relevant subjects to choose. In the same vein, Campbell-Heider, Sackett and Whistler (2008:370) found that career guidance counsellors were ill informed about the educational requirements, professional opportunities, rewards and advanced practice roles of today's nurses. Neilson and Jones (2012:588) identified that there is a decreasing number of Grade 12 school leavers who pursue nursing career. Furthermore, it is concluded that nursing seems not to be a popular career amongst high school learners given that a small number of the learners identified nursing as a first career choice (Neilson & Jones, 2012:591). The lack of knowledge and the

inadequate provision of information on nursing as a career during high school years becomes a barrier for Grade 12 learners to apply for nursing as a career.

In the Strategic Plan for Nurse Education, Training and Practice (DoH, 2013:42) it is emphasised that to ensure that nursing is a first-choice career and attract good cadres, career counselling must promote nursing image and begin during high school years. It is further stated in the same document that the following institutions and/or organisations, Nursing Education Institutions (NEIs); Department of Health (DoH); Private health providers; professional nursing organisations; Non-governmental organisations (NGO); and local high schools should provide career guidance exhibitions. In addition, the identified institutions must hold career fairs at least twice a year, and should have open days (DoH, 2013:60) to promote nursing as a career. It is important to have knowledge about careers during high school years. Dabula and Makura (2013:89), Lugulu and Kipkoech (2011:192) and Katz, Smart and Paul (2010:1) confirm that information on career guidance should be provided during high school years to attract the best learners to prepare them for institutions of higher education to pursue a mix of careers including the nursing profession.

It is on this account that this study aimed to identify the information provided to Grade 12 learners on nursing as a career in the Tshwane North district, Gauteng province in South Africa and to determine factors influencing Grade 12 learners to select nursing as a career.

1.2 PROBLEM STATEMENT

Worldwide nurse education institutions are unable to attract sufficient numbers of school leavers, thus there is a decline in Grade 12 or high school graduates enrolled for nursing (Neilson & McNally, 2013:208). Devi and Devi (2015:401) stated that research globally indicated that the low interest of high school learners in nursing as a career of choice is due to the perception that the nursing profession is losing popularity. The intake of nurses at one of the nursing colleges in Gauteng province South Africa indicates that there are far fewer applications from Grade 12 learners than the applications received from learners who completed Grade 12 several years back. This is evidenced by the number of learners

registered at the college in Table 1.1, which represents student nurses' intake over three years in a selected nursing college in the Tshwane district.

Table 1-1 Student nurses registered at a nursing College 2013 - 2015

Year	Applied in Grade 12		Applied several yrs. after completing Grade 12		TOTAL
	Number	Percentage	Number	Percentage	
2013	39	20	157	80	193
2014	28	14	168	86	196
2015	10	4	233	96	243
TOTAL	77	12	558	88	632

It is evident from Table 1.1 that less number of learners choose nursing as a career whilst in Grade 12. From 2013 to 2014 there was a 6 per cent decline of learners who applied to the nursing College whilst in Grade 12, as compared to 6 per cent increase of those who had completed Grade 12 several years back. There was 10 per cent decline in 2015 of learners who applied to the nursing College whilst in Grade 12, as compared to 10 per cent increase of those who had completed Grade 12 several years back. This shows that there is a growing concern of why current Grade 12 learners' interest in applying for nursing is declining. Chireshe (2012:309) found that Grade 12 learners career choices is affected by the ineffective career counselling as per Teachers' views that provides inadequate knowledge of prospective careers.

To date learners do not have adequate knowledge about nursing as a career despite the introduction of Life Orientation subject at schools to provide career guidance (du Toit, 2015: 20). Furthermore, the researcher is of the opinion that it is doubtful whether Life Orientation Teachers provide sufficient career guidance knowledge to learners to enable them to make informed career choices from vast career opportunities. High school learners are expected to have made career choice by Grade 10 and 11 and apply to the Higher Education Institutions (HEIs) and Further Education and Training (FETs) in Grade 12 (DBE, 2011:8). If learners start Grade 12 with adequate knowledge on which career to pursue, they would not be undecided about which career to apply for as undecidedness could easily lead to wrong career choices (du Toit, 2015:16). Provision of adequate, reliable, valid and useful

information to learners on careers plays a vital role in their decision to choose a career (du Toit, 2015:36; Lugulu & Kipkoech, 2011:192; Dabula & Makura, 2013:89). It is for this reason that the researcher in this study focused on the identification of information and factors influencing Grade 12 learners' choice of nursing as a career in the Tshwane district schools.

The provision of inadequate information on nursing as a career may be related to the poor applications to the NEI in Gauteng where this study was conducted. The NEIs in Gauteng province open applications for the programme R425, a four-year Diploma in Nursing (General Psychiatric and Community) and Midwifery, in April of each year (Gauteng Department of Health, 2011:4). High school learners in Grade 12 are expected to respond to the advertisement and apply before the closing date; however, the applications from these learners are declining as reflected in Table 1.1.

1.3 RESEARCH QUESTIONS, AIM AND OBJECTIVES

The two questions in this study are:

- What is the information provided to Grade 12 learners on nursing as a career in the Tshwane North district schools?
- What are factors influencing the choice of nursing as a career amongst Grade 12 learners in the Tshwane North district schools?

1.3.1 AIM

The aim of this study was to identify information and factors influencing Grade 12 learners' choice of nursing as a career in the Tshwane North district schools.

1.3.2 OBJECTIVES

The two objectives in this study are:

- To determine and describe the information provided to Grade 12 learners on nursing as a career in the Tshwane North district schools

- To determine and describe factors influencing the choice of nursing as a career amongst Grade 12 learners in the Tshwane North district schools.

1.4 DEFINITION OF KEY TERMS

Career: refers to an occupation undertaken for a significant period of a person's life usually with opportunities for progress, pursuing profession (Stevenson & Waite, 2011:214). In the study, career refers to the training in the nursing profession.

Factors: refer to circumstances and environmental influences that are helping in bringing about a result or change (Hornby & Deuter, 2015:305). In this study, factors related to circumstances that motivated learners to choose or not to choose the nursing career.

Nursing: means a caring profession practised by a person registered under Section 31, of the Nursing Act of 2005 who supports, cares for and treats a health care user to achieve or maintain health and where this is not possible, cares for a health care user so that he or she lives in comfort and with dignity until death (Nursing Act 33 of 2005: 6) In the study, nursing referred to the profession studied at a nursing college thereafter being registered with the South African Nursing Council.

Grade 12 Learners: means any person receiving education or obliged to receive education in terms of South African Schools Act (South African Schools Act 84 of 1996: 2011:5) In this study, a learner is a person registered for the 12th year of schooling or Grade 12 at the Tshwane North District Schools. It is important to note that in the study, the terms "school leavers", "matric students" and "high school learners" used in literature sources, pertained to the term Grade 12 learners.

Information: data that has been verified as accurate specific and organised for a purpose and presented within a context that gives it meaning and relevance, and can lead to an increase in understanding and decrease in uncertainty (Wessels, McGee, Prinsloo, McGee & Van der Poll, 2010: 2). In the study, information referred to the knowledge learners have about nursing as a career.

1.5 PARADIGM AND ASSUMPTIONS

1.5.1 PARADIGM

A paradigm is a lens through which the researcher views objects of research; it includes assumptions and the designs for collecting and interpreting data (De Vos, Strydom, Fouche & Delport, 2011:40). A paradigm guides the research, in terms of the approach, phrasing the problem, the goal, the design and data analysis method to be followed in the study (Botma, Greef, Mulaudzi & Wright, 2010:40 & 41). In this study, the researcher will follow the positivism paradigm with the belief that by following the steps of research, the research questions may be answered.

- **Positivism**

A positivism paradigm entails a systematic and orderly, disciplined way of acquiring evidence; the researcher observes, measures and makes sense of the facts studied (Polit & Beck, 2012:13). In addition, positivism as a scientific approach method was relevant to the study as the study followed a systematic, orderly and disciplined procedures to acquire information using quantitative design approach in order to determine and describe the information provided to Grade 12 learners on nursing as a career and to determine and describe factors influencing the choice of nursing as a career amongst Grade 12 learners in the Tshwane North district schools.

1.6 DELIMITATIONS AND ASSUMPTIONS

1.6.1 Delimitations

The study focused on Grade 12 learners in Tshwane North District who study Life Science, as they will be eligible to study nursing at the NEI. It can therefore not be generalised to all the schools in Tshwane Districts nor Gauteng province. The researcher had to contact learners outside class contact periods. From the time that the study was approved, the matric mock assessments were due and teachers wanted learners to focus on the extra lessons and the revision hence the study was conducted from August 2016 until March

2017. Financial and work constraints limited the opportunity to collect data in wider Tshwane and the researcher collected data on her own without the research assistants from the accessible schools because of financial implications.

1.6.2 Assumption

Assumptions are statements, beliefs or principles that are accepted as true based on logic reasoning without being proven nor scientifically tested; they may be implicit or explicit (Burns & Grove, 2013:4). The study applied the ontological, epistemological and methodological assumptions.

1.6.2.1 *Ontological assumptions*

Ontology is the study of the nature of reality and what can be known about that reality. This assumption states that real world is driven by causes and effects, the researcher believes reality is unchanging and follows the law (Polit & Beck, 2012:13; Terre-Blanche, Durrheim & Painter, 2009:6). The reality and nature of information and factors influencing Grade 12 learners' choice of nursing as a career in the Tshwane North district schools were determined and described.

1.6.2.2 *Epistemological assumptions*

Epistemology is the study of different ways in which people develop and validate knowledge about the world (Bless, Higson-Smith & Sithole, 2014:391). This assumption deals with nature of knowledge, the assumption implies that the researcher is independent, detached and an objective observer of reality. Research is more factual and is sometimes used to generalise the findings (Polit & Beck, 2012:13). The researcher determined the information and factors influencing Grade 12 learners' choice of nursing as a career in the Tshwane North district schools.

1.6.2.3 *Methodological assumptions*

Methodology applies rules and procedures that guide how the researcher obtains knowledge and study whatever they believe need to be known through quantitative approaches (Polit & Beck, 2012:13). The researcher followed the quantitative approach steps to determine and describe the information given to Grade 12 learners on nursing as a career in the

Tshwane North district schools and to describe factors influencing the choice of nursing as a career amongst Grade 12 learners in the Tshwane North district schools.

1.7 RESEARCH DESIGN AND METHODS

A descriptive survey design was used to address the study objectives. The survey design is a quantitative research approach in which all aspects of the research process are decided upon before data collection begins (Botma, Greef, Mulaudzi & Wright, 2010:108-110), in which the researcher systematically collects data from Grade 12 learners in Tshwane North district. This design involved determining the perceptions held by high school leavers of nursing as a career. A survey by means of a self-administered questionnaire was used by the researcher to collect data to determine and describe; the information provided to Grade 12 learners and factors influencing the choice of nursing as a career in the Tshwane North district schools. Data was collected and analysed and reported. See details in Chapter 3.

1.8 IMPORTANCE AND BENEFITS OF THE PROPOSED STUDY

The study may be of significance and benefit to Grade 12 learners in that the results might determine the information that should be communicated to schools regarding nursing as a career choice. This might enable the students to make informed decisions about nursing as a career whilst in Grade 12.

Furthermore, the results might benefit the DBE by raising awareness for Life Orientation Teachers regarding factors to include for promoting the choice of nursing among high school learners. The results might form part of information on nursing career in the information pamphlets for Life Orientation Teachers including Grade 12 learners.

The study may play a significant role within the nursing profession by improving the intake of young and academically gifted learners directly from Grade 12 who understand what nursing is all about. Community may also benefit from this study as the study may assist in increasing the knowledge about nursing as a career to learners in earlier grades, thus attracting more Grade 12 learner to enter the nursing profession.

1.9 ETHICAL AND LEGAL CONSIDERATIONS

The University of Pretoria Ethical committee, Gauteng Department of Education and the selected schools' principals approved the study. See Annexure D, E and F for the permission letters. The following ethical principles were observed in the study:

1.9.1 Informed consent

This ethical principle emphasises the respondents' right to know what the research is all about and how the study can affect them, risks and benefits of the study (Bless et al., 2014:32). The respondents were informed on the purpose of the study and informed consent was obtained from all respondents above 18 years of age.

1.9.2 Confidentiality

This ethical principle emphasises that all information provided by respondents, particularly sensitive and personal information should be protected (Bless et al., 2014:32). No personal information was written on the questionnaire to ensure confidentiality and to protect all respondents' identity. This enabled respondents to share information freely. Questionnaires were only labelled 1, 2, 3 etc. with no names included.

1.9.3 Beneficence

This ethical principle relates to the research that do not harm but contribute to the well-being of others (Bless et al., 2014:30). Learners who participated in the study were not harmed in any way as there was no experiment carried out. Instead, future learners may be assisted in understanding what the nursing career entails. Only questions on factors influencing the choice of nursing as a career and information they possessed on nursing was included in the questionnaire.

1.9.4 Autonomy

This ethical principle incorporates the freedom of choice amongst respondents. Respondents should voluntarily participate in the study (Bless et al., 2014:30). No respondent was forced to undertake the study and was all at liberty to withdraw from the study at any time should they have felt uncomfortable to continue with the study.

1.9.5 Justice

This ethical principle is based on the belief that all people should be treated equally, no respondent was discriminated against based on race, gender, religion or disability (Bless et al., 2014:30), All learners and schools in the Tshwane North District had the equal opportunity to take part in the study.

1.10 CONCLUSION

In this chapter, the background, aim and objectives to the study was described. In the next chapter, an overview of the relevant literature regarding the information on nursing as a career and factors influencing the choice of nursing as a career amongst the Grade 12 learners is to support this study.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter presented the background, aim and objectives of the study. This chapter will present the thoughts, views and assumptions made by various authors and researchers on nursing career information and factors influencing the choice of nursing career amongst the Grade 12 learners. A literature search was done through Google Scholar, UPSpace and EBSCOhost using the searching terms “nursing information”, “high school learners” and “nursing career” as key words. Due to limited relevant articles, the search covered the period 2003 to 2017. The literature reviewed focused on information on nursing as a career among Grade 12 learners and factors influencing their career choice of nursing career.

The literature review will be structured as follows:

- Information on nursing as a career provided to high school learners
- Department of basic education’s role
- Information provided by nurses
- Information from parents and other sources
- Adequacy of the information provided
- Factors that influence the choice of nursing a career amongst learners
- Some negativity towards nursing
- Image of nurses and desire to care
- Working environment and conditions of nurses

The literature review in this study focused on: information on nursing as a career and factors influencing the choice of nursing as a career amongst the Grade 12 learners. The literature reviewed focussed on the information provided on nursing as a career in relation to; the role of the department of education, career counsellors and Teachers, information provided by nurses, access of information from other sources and the inadequacy of information provided. The literature revealed that learners need information about the nursing profession

and career progression in nursing. Mphahlele (2011:20 & 55) and Dante et al. (2013:129), Tan-kuick (2011:8) and Neilson and McNally (2013:208) alluded that high school learners had insufficient information about the nursing profession. Sources of information for learners include family, school, career guidance program, media and peers (Mudhovozi & Chireshe, 2012:167).

Literature on factors that influence the choice of nursing as a career amongst the Grade 12 learners was reviewed. Some negativity towards nursing from the significant others and teachers' influence played a role in the choice of career (Gilchrist & Rector, 2007:283). Image of nurses, working environment and conditions of nurses, academic achievement and grades were found to influence the choice of nursing career (Cho, Jung & Jang, 2010:180; Neilson & McNally, 2013:24).

2.2 INFORMATION ON NURSING AS A CAREER PROVIDED TO HIGH SCHOOL LEARNERS

The lack of information concerning nursing issues deterred other learners from choosing the nursing career (Achilles, 2019:16). The literature in this section focused on the provision of information on nursing as a career among high school learners and school leavers in relation to the information provided by the: Department of Basic Education', nurses, significant others and other sources and adequacy of information provided. Sources of information on nursing as a career include schools, practicing and qualified nurses, significant others and other sources such as the media. The information gap from these sources was confirmed in the literature search.

2.2.1 Department of Basic Education's role

The Department of Basic Education (DBE) is one of the departments of the South African government, it oversees primary and secondary education at schools from Grade 0 to Grade 12 in South Africa. School is the institution where learners get knowledge. All schools from Grade 0 – 12 are classified under the ministry of Department of Basic Education. Schools has a positive influence on students' career choices (Mtemeri, 2017:80). Teachers were identified as potential vehicles for the provision of information on nursing as a career (Herr,

2002:18). In their study, Neilson and McNally (2013:24) concurred with other researchers that Teachers contribute to the career choices among learners and therefore need the latest information related to the nursing career. Research conducted by Lugulu and Kipkoech (2011:192) in Kenya indicated as crucial the importance of having knowledge about various careers during high school years in making a lifelong career choice. Lugulu and Kipkoech (2011:192) further established that in most schools, career guidance and counselling was included in general counselling services in Life Orientation (LO), dealing with cases that included drug abuse, alcohol, HIV/AIDS and any other problems. Neilson and McNally (2013:24) alluded that it is important to educate guidance teachers and career advisors to ensure that they have current information regarding nursing career. Teachers often have a strong influence on the career perceptions and choices of careers among learners (Neilson & McNally, 2013:24)

Even though efforts are in place to provide career information to learners, some challenges persists. In the study conducted by Mkhize and Nzimande (2007:19) it was revealed that schools support the view to include information on careers in LO curriculum. Mkhize and Nzimande, (2007:20) further acknowledged that the schools play a role in the clarification of misperceptions or correction of misinformation regarding nursing as a career. Provision of in-depth information by teachers on nursing as a career of choice might change the learners' perceptions on nursing (Sathekge, 2014:3).

To ensure that teachers carry out recruitment for nursing career and other professions, schools need to be supported to mitigate the challenges they are faced with to date. Career guidance is now classified as a fundamental theme in LO (Mahlangu, 2011:239). However, Mahlangu (2011:239) further stated that schools are faced with limited resources for providing career counselling, the challenges include insufficient resources, financial and human resources, and this have a negative impact on the provision of career guidance and counselling services at schools. Career counselling in South African schools was for many years compromised due to lack of teacher training in school guidance and counselling, under-resourced schools and the low-status-accorded career counselling (Maree, 2013: 417). On the other hand, career advisors view the career guidance services they offered to learners ineffective (Chireshe, 2012: 309). A rethink is required on how career counselling

is promoted at schools and whether the theory and practice of Life orientation and life skills acquisition is appropriate and satisfactorily aligned with South African and global developments (Maree, 2013: 417).

The amount and quality of information that Life Orientation teachers have and their views or perceptions of nursing may have either a positive or negative influence on learners' choice of nursing as a career. (Sathekge, 2014:3). Life Orientation teachers are not promoting nursing as a career to a learners due to the inadequate information they have about nursing and related career opportunities (Mbhangi, 2014:53). In addition, teachers have limited knowledge about the desired attributes that nurses should possess (Sathekge, 2014:50). The results of the study by Sathekge (2014:50) indicate that Life Orientation teachers have limited knowledge of the current roles and responsibilities of nurses. It is therefore important to ensure that career guidance teachers have accurate information to promote nursing as a career to high school learners and to adequately execute their role as career advisors (Sathekge, 2014:51). Mbhangi (2014:53) also confirms that LO teachers do not have adequate information about nursing and the opportunities involved. In their study, Neilson and McNally (2013:24) found that teachers and career advisors contribute to the career choices among learners and therefore need the latest information related to the nursing career.

Dabula and Makura (2013:89) wrote that career choices for many high school learners are accidental, that career guidance and counselling at high school should prepare learners for institutions of higher learning. Dabula and Makura (2013:89) recommended that it is crucial that institutions of higher learning to guide and advise high school learners on the programmes offered and the entry requirements thereof and that career guidance programmes be extended to more learners in the country. Bholanath (2007:1) also revealed that the majority of learners leave school with only a vague knowledge of employment opportunities and with little insight as to the most appropriate career direction for their abilities, interests and personality.

Learners could make informed decisions on whether to enter the nursing profession if provided with detailed information about the content of nursing career (McLaughlin, Moutray

& Moore, 2010:411). Grainger and Bolan (2005:40) found that learners may not apply to nursing if they are unaware of what nursing is about. Furthermore, Grainger and Bolan (2005:40) revealed that the learners' orientation towards nursing was higher at the end of the nursing program than at the beginning, which confirms that the orientation towards nursing will encourage learners to apply or choose the nursing career.

2.2.2 Information provided by nurses

Nurses have accurate information about nursing as a career therefore are better source of information for learners and teachers. Provision of information on nursing by nurses seems to be a positive recruitment strategy. In the study by Katz et al. (2010:10), it was evident that students who received information about nursing as a career from nurses, were much more likely to choose the nursing career. It appears that learners need accurate information and considerable support for choosing nursing as a career, especially from the nurses as the custodian of the nursing profession. Katz et al. (2010:10) further recommended that in order to influence students to choose nursing as a career, the provision of information to students about nursing career, such as accurate information on nursing salaries and job market, should not be overlooked. In this regard information provided by nurses becomes relevant.

In a study conducted by Buerhaus, Donelan, Norman and Dittus (2005:79) it was revealed that information from practicing nurses influenced the choice of nursing as a career by learners. Furthermore, the study identified that information learners received from several sources about nursing was not accurate. Learners did not have knowledge about career progression in nursing such as in clinical, managerial and academic (teaching research) (Dante et al., 2013;131). In their study, Whitehead, Mason and Ellis (2007:495) confirmed that information from nurses as learners have a very limited view of nursing as a career, as they were unaware of the diversity and opportunities within the nursing career; this showed their lack of knowledge about the nursing career. The researchers further recommended the need to raise awareness of nursing as a career option by nurses who possess knowledge on clinical and academic pathways in nursing.

The need for nurses to provide information on nursing as a career was confirmed by Neilson and McNally (2010:12): all the students who participated in the camp where nurses provided information to learn more about nursing were more enthusiastic about nursing as a career than they were before the camp. Assisting students in gaining accurate information, being exposed to role models and experiencing first-hand information on what nurses do has been the motivation for more summer nursing programs (Katz et al., 2010:2). Another confirmation was made by Katz et al. (2010:7), that after the learners were exposed to the nursing program they considered nursing as a career that would help them achieve their goals including financial goals. The study resulted in significant changes in the students' knowledge and opinions of nursing as a career. Katz et al, (2010:11) identified that exposure of learners to a nursing program, changed the learners' perceptions of nursing career. Further, Katz et al. (2010:11) recommended the provision of accurate information to students on nursing careers..

In the study conducted by Mphahlele (2011:55), the school leavers acknowledged that they needed information about the nursing profession and career progression in nursing. Dante et al. (2013:129) and Whitehead et al. (2007: 495) posit that more information about nursing as a career is needed. Further Gilchrist and Rector (2007:283) recommended that information about the entry requirements into the nursing programs and the benefits of a career in nursing should be provided at schools to attract learners into the profession.

Whitehead et al. (2007:495) recommended that if the nursing profession is to stimulate more interest in nursing as a potential career choice for school leavers, the nursing profession needs to broaden awareness among young people regarding the diversity of nursing as a profession and provide more information about reimbursement and career enhancement. Grainger and Bolan (2005:40) found that learners may not apply to nursing if they are unaware of what nursing is about. In their study it was revealed that the learners' orientation towards nursing was higher at the end of the nursing program than at the beginning, which confirms that the orientation towards nursing will encourage learners to apply or choose the nursing career

2.2.3 Information from parents and other sources

Other information providers are family members. Family provide information to learners on careers (Mkhize & Nzimande, 2007:13). The information and views from family members as significant others on nursing seemed to be extremely negative and outdated, as they discourage high academic achieving learners from entering the nursing profession (Neilson & McNally, 2013:209). Therefore parents and other family members need to have relevant information on nursing.

Learners indicated that their parents, the media, teachers and career services were sources of career information (Neilson & McNally, 2013:207).

2.2.4 Adequacy of the information provided

Whitehead et al. (2007: 495) found that if potential nurses are provided with adequate information regarding nursing they would choose nursing as a career. Furthermore, Whitehead et al. (2007: 495) stated that though learners acknowledged that nursing is very much associated with caring and helping people, learners had a very limited view of nursing as they were still unaware of the diversity within nursing and the nursing role.

Mmema (2010:95) stated that career choices of black Grade 12 learners, in rural schools are based on insufficient information about careers. Furthermore Mmema (2010:95) recommended and suggested that more effort should be made to assist learners with career choices. Chireshe (2012:309) affirmed that some learners in Grade 12 had insufficient information and knowledge of their prospective careers. The author further revealed that learners pass matric examinations without any career counselling, thus these learners do not have a clear sense of their prospective careers. Herr (2002:18) identified that many Grade 12 learners do not have plans on what to do after matric.

Information learners have about nursing from several sources was not accurate and that might be the reason for not choosing nursing as a career (Dante et al., 2013:131). Campbell-Heider et al. (2008:370) confirmed that many guidance counsellors were ill informed about the educational requirements, professional opportunities and rewards, and advanced

practice roles of today's nurses. As identified by Tan-kuick (2011:8), learners had the misunderstanding that nursing is a hospital or clinic based profession and progression into various fields of nursing was unknown to most learners. Furthermore, Neilson and McNally (2013:208) confirmed that learners have false impressions about nursing as a career; these false impressions affect their choice of nursing as a career. There is little knowledge among school leavers about the overall diversity of the nursing career, for example becoming a lecturer, executive manager or clinical specialist (Mphahlele, 2011:20).

A lack of knowledge concerning nursing issues deterred other learners from opting for the profession, the learners' minds were filled with negative perceptions of the profession (Achilles, 2010:16). The interest of learners in other careers outside of nursing is mainly because they do not get exposed to accurate information on nursing and they end up depending on unreliable sources of information (Mkhize & Nzimande, 2007:24). Achilles, (2010:16) affirms that learners do not have accurate information about the modern day to day nursing activities, but are aware of most of the issues regarding the profession. Students know very little about the nursing profession and the nurses' roles, as they still perceive nurse's role to be subordinate to the doctor's role with limited decision-making abilities (Liaw, Wu, Holroyd, Wang, Lopez, Lim & Chow, 2016:535).

Provision of detailed information about the content of nursing as a career should attract the learners to the profession, as learners could make informed decision on whether to enter the profession (McLaughlin, Moutray & Moore, 2010:411).

2.3 FACTORS THAT INFLUENCE THE CHOICE OF NURSING AS A CAREER AMONGST LEARNERS

There are several factors that play a role in promoting nursing as a career amongst learners. The literature focused on factors that influence the choice of nursing as a career among high school learners and school leavers in relation to some negativity towards nursing, the image of nurses and the working environment and conditions of nurses.

2.3.1 Some negativity towards nursing

2.3.1.1 *Significant others*

The effect of parents' career, and teachers' and friends' influence on the choice of career was found to be significantly related to student' consideration of nursing as a career.

- **Parents**

Negative attitude of parents as the significant others creates a platform for learners not to choose nursing as a career. Family involvement refers to the extent to which the parents or family members influence the career plans of children; the family can directly or indirectly influence a young person's career choice. The involvement of family in career choice includes the extent to which parents give encouragement, responsiveness, approval and financial support in matters concerned with the career plans of their children (Mudhovozi & Chireshe, 2012;167). Parents as significant others either influence or do not influence the choice of nursing as a career by their children. The role of parents and family can affect the learner's decision to choose nursing as a career either positively or negatively (McLaughlin, et al., 2010:410; Mkhize & Nzimande, 2007:13). Some high school learners with high academic performances are negatively influenced by parents and significant others including friends to choose other health careers than nursing. (Cowin & Johnson, 2011:261; Cho, Jung & Jang, 2010:180; Whitehead et al., 2007:496). Learners indicated that their parents, the media, teachers and career services had negative influence regarding nursing as a career. Learners expressed feelings of guilt for choosing to pursue nursing as a career and expressed that they would be letting their parents down (Neilson & McNally, 2013:207). This was similar to the view of Law and Arthur (2003:29), who stated that 69.5% of the respondents agreed that their parents had a positive influence on their career choice.

In contrast to the negative influence by parents, the study conducted by Law and Arthur (2003:29) attested that 69.5% of the respondents agreed that their parents had a positive influence on their career choice.

- **Teachers' influence**

Positive and negative reports from learners emerged regarding the teachers' influence on their career choice. The attitude of some teachers towards nursing as a career was not positive, as they seemed to come up with all sorts of barriers when pupils pursued nursing work experience (Neilson & McNally, 2010:11; Mudhovozi & Chireshe, 2012:167). On the other hand, students, who would not consider nursing, reported perceiving significantly more positive views on nursing as a career from their teachers (Neilson & McNally, 2013:208).

2.3.1.2 Academic achievement and grades

Nursing career was found to not be popular among school students with high academic achievement (Neilson & Jones, 2012:591), as nursing was often not their first-choice career. Seemingly, the grades the learners achieved impacted on the choice of nursing as a career. (Neilson & Jones, 2012:588). Mooney, Glacken and O'Brien (2008:390) also revealed that nursing was not the first choice of career for many students; it was a default due to poor academic results from secondary education. Liaw et al. (2016:535), Achilles, (2010:16) and Neilson and Jones (2012:590) found that learners chose nursing as a career after failing to achieve the entry requirements for other careers. This was confirmed by Neilson and Jones (2011:588), who also found that candidates to nursing courses were of average to below average academic ability; some students stated that they wished to follow other careers, but had not achieved the academic entry requirements. In their study, Neilson and Jones (2011:591) confirmed that students would consider nursing if they obtained lower examination grades.

Neilson & McNally, (2013:207) also alluded that teachers were steering the academic achieving learners away from a career in nursing, and on the other hand encouraged learners with average or lower grades towards nursing career. Despite initially considering nursing as a career, most of the high achievers did not pursue nursing as a career choice (Neilson & McNally, 2013:208).

2.3.2 Image of nurses and desire to care

Mooney et al. (2008:390) found that “caring for persons” remained the predominant reason for choosing a career in nursing; however, nursing was not always the first choice of career for many who enter the profession due to the image portrayed by nurses. Negative attitude such as not having good skills, and not being tolerant of the patients, and behaviour that is totally against the ethics of the profession are some of the reasons why some students do not choose nursing as a career (Achilles, 2009:16).

The desire to help and care for others and working with people in a variety of work settings were the reasons given by respondents in a study conducted by Cho, Jung and Jang (2010:180). The literature on career choice also identifies that the traditional views of nurses and nursing as caring and nurturing remain prevalent and continue to influence the decision by learners to enter the profession (Price, Hall, Angus & Peter, 2013: 306). Neilson and Jones (2011:588) found that the main motives for pursuing nursing as a career were the desire to help and care for others. This was confirmed by Whitehead et al. (2007:495), who found that the reasons students were interested in nursing was broadly related to the fact that they like helping people and making them well.

2.3.3 Working environment and conditions of nurses

The nursing profession is still one of the careers of choice for some of the younger and older learners because of the opportunities associated with this profession (Buerhaus et al., 2005: 75). Cho et al. (2010:180) found that learners are influenced by the quality of the work environment such as security, salary and safety. Learners want a secure, stable and respected career with great opportunities (Law & Arthur 2003:23; Cho et al., 2010:180) as such some choose nursing as a stable career.

On the negative side, nursing is characterised by negative factors in the work environment. Some of these factors deter learners to apply for nursing, such as a shortage of nurses. In the Strategic Plan for Nurse Education, Training and Practice (DoH, 2013:42) it is mentioned

that poor working conditions, shortage of supplies and equipment and poor working environments contribute to the shortage of nurses.

It is also supported that low remuneration is contributing to the shortage of nurses (DoH, 2013:42). If learners perceive these negative aspects about nursing career, they may not apply to the nursing colleges. Financial benefits, disadvantages and advantages were also coined to be the likelihood to choose (Whitehead, Mason & Ellis, 2007:495). Achilles, (2010:16) Katz et al. (2010:6), Mkhize and Nzimande (2007:13) and Liaw et al. (2016:535) found that learners were not interested in nursing, as nurses are underpaid, work long hours and are understaffed, however this contrasted with Law and Arthur's (2003:28) findings, where students thought that one could earn a good salary as a nurse. On the positive side, in order to address poverty, learners choose nursing as a career. Neilson and Jones (2011:589) revealed that many students who had considered nursing as a career, were from the low income/low socio-economic backgrounds.

The dislike of blood was one of the reasons that deterred learners from choosing nursing as a career (Achilles 2010:16; Mkhize & Nzimande, 2007:13). Some parents consider nursing unsafe as nurses are exposed to diseases, which could be the reason they do not support nursing as a career option for their children (Campbell-Heider et al., 2008:382). Contrary to this, some students indicated that they were willing to work with sick people (Law & Arthur, 2003:28). Katz et.al., (2010:11) stated that learners see nursing as having lower status than other health careers; they think that nurses are doctors' assistants. The working environment of nurses seem not to encourage learners to join the nursing profession, as some fear being subordinate to doctors, which is not accurate information, as nurses function independently from doctors (SANC, 2013:4).

2.4 CONCLUSION

This chapter discussed the views of other researchers in terms of information provided to learners on nursing as a career as well as factors influencing the choice of nursing as a career. Most learners do not have adequate and accurate information about nursing as a career and some providers of information about nursing have inadequate knowledge about nursing as a career. It is evident that there is a knowledge gap about nursing as a career

amongst learners, and that learners are influenced by their significant others, academic achievements and working environments amongst others in their choice of nursing as a career. The next chapter will present the research methodology.

CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

The previous chapter discussed the views of other researchers on the information provided to learners about the nursing as a career and the factors influencing their choice of nursing as a career. In this chapter, the research design and methods used to meet the study objectives are described which are to determine and describe the information given to Grade 12 learners on nursing as a career and to determine and describe factors influencing the choice of nursing as a career amongst Grade 12 learners in the Tshwane North district schools. The research setting, the instrument used, population, the sample and sampling methods are discussed. Research methodology directs the research project, and is the general approach the researcher takes in carrying out the research project. It dictates and controls the acquisition of data (Leedy & Ormrod, 2014: 4).

3.2 STUDY DESIGN

The study design is the plan or strategy for solving a research problem, it provides the overall structure or framework to be followed in the research, data collection and analysis (Terre-Blanche, Durrheim & Painter, 2009:34). The research design is the strategic framework, or blueprint, for conducting a study (Burns & Grove, 2013:253; Terre-Blanche et al., 2009:34). It involves a set of decisions regarding what topic to research, the population to be studied and methods for a study to gather information (De Vos et al., 2011:143). The quantitative descriptive design was followed to include a large number of Grade 12 learners. The study aimed to determine and describe the information given to Grade 12 learners on nursing as a career in the Tshwane North district schools and factors influencing the choice of nursing as a career amongst Grade 12 learners in the Tshwane North district schools.

3.2.1 Quantitative design

A quantitative research aims at describing rather than explaining social phenomenon (Bless, Higson-Smith & Sithole, 2014:183). The research design identifies the characteristics of an observed phenomenon (Leedy & Ormrod, 2014:190). Specific information that is limited to information on nursing as a career and factors that influence the choice of career among the Grade 12 learners, was collected (Macnee & McCabe, 2008:29). A quantitative design uses numbers to describe phenomena, in this study a descriptive design was followed. A descriptive design is a non-experimental study with the purpose of observing and describing a situation as it naturally occurs (Polit & Beck, 2012:226). A descriptive design yields quantitative information that can be summarised through statistical analysis (Leedy & Ormrod, 2014:190). Data in the descriptive study is obtained systematically and in a standardised manner to yield information that is objective and can be statistically summarised (De Vos, Strydom, Fouche & Delpont, 2011:66)

The purpose of this study was to identify information and factors influencing Grade 12 learners' choice of nursing as a career in the Tshwane North district schools, hence the approach chosen was followed. In this study, the design was appropriate as the researcher could collect data from learners in the Tshwane North District schools, coded into numerical form and statistically analysed to identify and describe information and factors influencing Grade 12 learners' choice of nursing as a career. The design is structured, aspects of the research process are decided upon before data collection begins. (Botma, Greef, Mulaudzi & Wright, 2010:108-110).

3.3 RESEARCH SETTING

The research setting is the area where a study is conducted, the area can be natural, partially controlled or highly controlled (Burns & Grove, 2013:40). The study was conducted in the Tshwane North district, a sub-district of Tshwane district in Gauteng province. The Department of Education in the Tshwane district is divided into four sub-districts namely; Tshwane North, Tshwane West, Tshwane South and Gauteng North. The Tshwane North District is further divided into four circuits.

There are 185 high schools in the Tshwane district and 32 high schools in Tshwane North District. The Tshwane North District is further divided into four circuits and there are nine high schools in each circuit. The study was conducted in high schools in all four circuits. There are \pm 28600 Grade 12 learners in the Tshwane district and \pm 7000 Grade 12 learners in the Tshwane North district.

The furthest school is \pm 48km from the Nursing Education Institutions (NEI) and the nearest is 5km from the NEI and 4km from the hospital. The nearest health facility to a school is 1km and the furthest 5km. All schools have access to a health facility.

The map below shows the position of the Tshwane North district in the Gauteng province where the study was conducted. Life Science, Life Orientation, English and Mathematics are taught in all the schools.

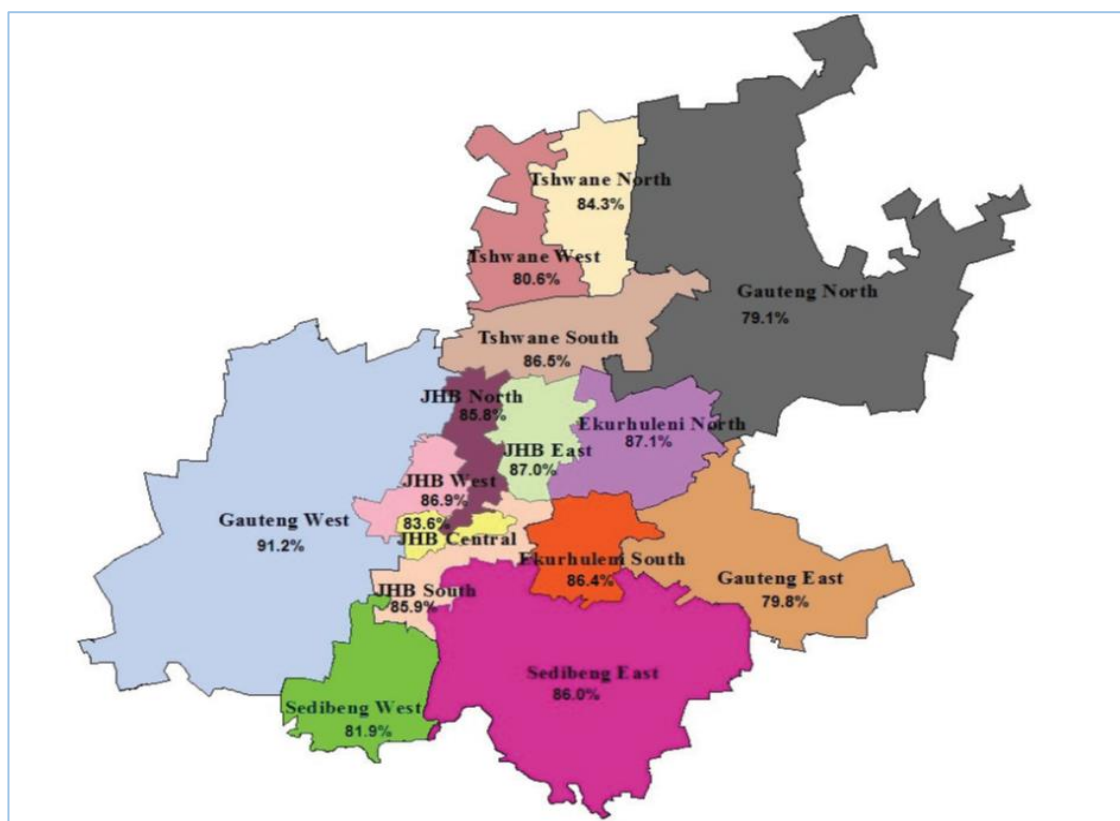


Figure 3-1 Map of Gauteng Department of Education Districts

3.4 RESEARCH POPULATION AND SAMPLING

3.4.1 Population

Population is a complete set of events, people, or things to which the research findings are to be applied (Bless et al., 2014:394). It is a larger pool from which sampling elements are drawn and to which findings are generalised (Terre-Blanche et al., 2009:562). The population has one or more characteristics in common. The population for this study comprised of all high schools and all Grade 12 learners from high schools in the Tshwane district. The schools are the sources of information on nursing as a career for learners. The learners were of different age, race and from different residential areas in the City of Tshwane. There are ±7000 Grade 12 learners in the Tshwane North District.

3.4.2 Sample

A sample is a group of elements drawn from the population (Bless et al., 2014:295). Botma et al. (2010:125) define a sample as a representation of the population from which conclusions can be drawn about the population. In this study, the Tshwane North District was sampled from the four districts in Tshwane, eight schools were a sample of the 32 schools from the Gauteng North District and lastly the 385 learners were the sample of ±7000 Grade 12 learners in 32 high schools in the Tshwane North District.

3.4.2.1 Sample size determination

To select a representative sample from the population of ±7000 Grade 12 learners, the Cochran method or sampling technique was adopted (Cochran, 1963:75). The equation

used is $n_0 = \frac{Z^2 pq}{e^2}$, which is valid where n_0 is the sample size, Z^2 (1.96) is the abscissa of the normal curve that cuts off an area α at the tails ($1 - \alpha$ equals the desired confidence level, e.g., 95%), e is the desired level of precision, p is the estimated proportion of an attribute that is present in the population, and q is equal to $1-p$. The value for Z is found in statistical tables, which contain the area under the normal curve. In this study, since the

population was large with unknown variability, the assumption is $p=0.5$ (maximum variability) and used 95 per cent confidence interval and 5 per cent precision (which is 0.05 level of significance). The resulting sample size was calculated to ± 385 Grade 12 learners. Eight groups was selected, one group per school.

3.4.2.2 Sampling

Sampling is the technique by which a sample is drawn from the population. It is a process of selecting the subset or a portion of the population to represent the entire population in the study (Botma et al., 2010:124). In this study, multistage sampling was done in three stages namely; Stage 1: Purposive sampling, Stage 2: Systematic random sampling and Stage 3: Purposive sampling.

- **Stage 1: Purposive sampling**

Purposive sampling is used to choose a sample that is appropriate for a certain research problem with rationale or purpose to support the choice of sampling method (Leedy & Ormrod, 2014:221). Subjects are selected conveniently with a purpose (Holzemer, 2010:87). This sampling method can be used as the first stage in two stage sampling (Polit & Beck, 2012: 279). The Department of Education in the Tshwane district is divided into four sub-districts. The district is already clustered into four districts namely: Tshwane North, Tshwane West, Tshwane South and Gauteng North. The Tshwane North district was purposely selected due to the cost implications, time constraints and convenience for the researcher as the study was not funded. Schools and learners from this district met the inclusion criteria of the study.

- **Stage 2: Systematic random sampling**

Systematic sampling involves selecting subjects based on a particular interval, every k^{th} case from the sample frame or list, the first participant is selected randomly from the sample frame and then followed by randomly selecting every k^{th} case (Polit & Beck, 2012: 283; Holzemer, 2010:88). Schools were listed and numbered, the selected k^{th} was 5, starting from school number 2 every 5th school was selected, see Table 3.1. The Tshwane North District is divided into four circuits namely: Circuit 1, 2, 3 and 4. The researcher did not need to

cluster the schools, as it was already done by the Gauteng Department of Education (see Table 3.1). There are 36 high schools in the Tshwane North District; nine city high schools in Cluster 1, nine township high schools in Cluster 2, nine rural and semi-rural high schools in Cluster 3 and nine semi-rural high schools in Cluster 4 (see Figure 1 below). To select representative schools from each geographical cluster, a systematic random sampling method was used during the second stage to select eight schools from 36 schools.

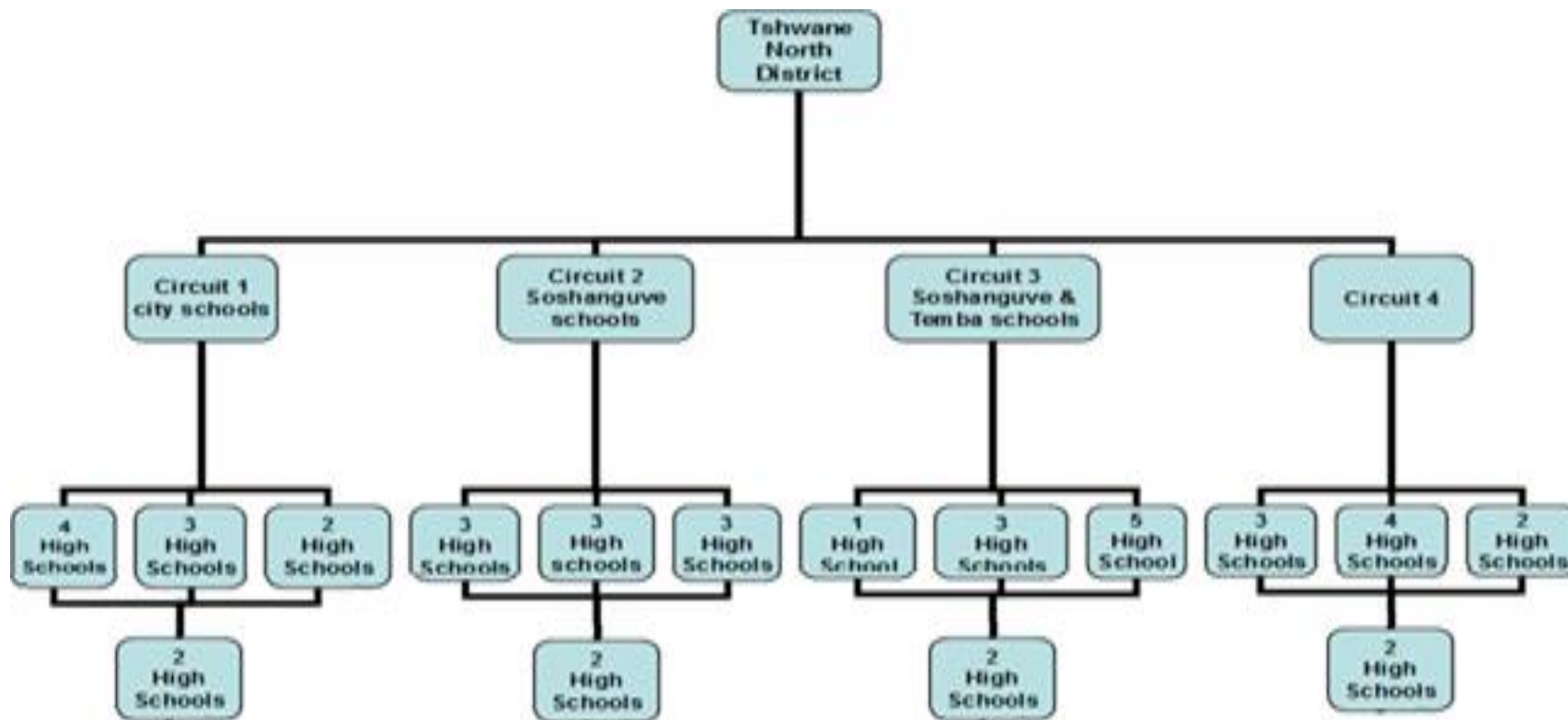


Figure 3-2 Tshwane North Districts High Schools

The sample frame that contains the names of the 36 schools from the Tshwane North district was then compiled and schools were listed and numbered (see Table 3.1 below). The researcher initiated the systematic random sampling method by calculating the sampling interval width (k) using the formula;

$$k = \frac{N}{n}$$

where, N is the population and n is the sample size (Polit & Beck, 2012: 283). The sampling interval (k) was five; and school number 2 was randomly selected as the first school. Applying the sampling interval, the second school was school number 7 followed by school number 12, etc. This procedure ensured that each school in the population (of 32 schools) had an equal probability of selection. The process ended with eight schools, as shown in Table 3.1. Two schools were selected from each circuit.

Table 3-1 Sampling frame for Schools

	Schools	No		Schools	No		Schools	No		Schools	No
Circuit 1	A	1	Circuit 2	J	10	Circuit 3	S	19	Circuit 4	BB	28
	B	2		K	11		T	20		CC	29
	C	3		L	12		U	21		DD	30
	D	4		M	13		V	22		EE	31
	E	5		N	14		W	23		FF	32
	F	6		O	15		X	24		GG	33
	G	7		P	16		Y	25		HH	34
	H	8		Q	17		Z	26		II	35
I	9	R	18	AA	27	JJ	36				

- **Stage 3: Purposive sampling**

This method of sampling is used with a specific purpose in mind (Maree, 2016:198; Leedy & Ormrod, 2014:221). Purposive sampling makes use of the researcher's knowledge about the population to select a sample (Polit & Beck, 2012: 279). Out of the ±7000 Grade 12 learners, 362 respondents who met the inclusion criteria were purposively selected from the eight selected schools in Stage 2. For this study, the researcher purposely selected the learners who took Life Science and English, as these subjects are the prerequisite for admission into the nursing programme at the Nursing Education Institute in Gauteng province.

3.4.2.3 Inclusion criteria

Inclusion criteria are elements that the subject must possess to be part of the target population (Burns & Grove, 2013:291). The following inclusion criteria were considered in this study:

- Schools within Tshwane North District
- Grade 12 learners who selected Life Science and English as subjects
- Learners who were above 18 years of age.
- Learners who have signed an informed consent were included.

3.4.2.4 Exclusion criteria

Exclusion criteria are the elements that may cause a person to be excluded from the target group (Burns & Grove, 2013:291). The following exclusion criteria were considered in the study:

- Schools outside Tshwane North District Schools
- Grade 12 learners who did not select Life Science and English as subjects
- Learners younger than 18 years of age
- Learners who did not sign the informed consent.

3.5 DATA COLLECTION

Data is the information collected in the study (Macnee & McCabe, 2008:25). Data collection aim to measure the variables numerically, clearly and accurately so that they can be statistically described and analysed (Macnee & McCabe, 2008:173). The data collection method used was a Group Administration Questionnaire, where the researcher waits while the group of respondents completes the questionnaires (Maree, 2016:176). The questionnaire was administered to eight groups, S1 had 16 learners, S2 had 20 learners, S3 had 58 learner, S4 had 32 learners, S5 had 69 learners, S6 had 60 learners, S7 had 82 learners and S8 had 25 learners from eight selected schools were selected. The researcher went through the questionnaire with the learners beforehand for them to understand the tool clearly. The purpose of this study was to identify information and factors influencing Grade 12 learners' choice of nursing as a career in the Tshwane North district schools.

The survey method involves acquiring information about one or more groups of people by asking a series of close-ended questions to the respondents and tabulating and summarises the answers with percentages, frequency tables and statistical indexes and then draw inferences about the population. The goal is to learn about a large population by surveying a sample of that population (Leedy & Ormrod, 2014: 195). The survey method provides quantitative descriptions of a population by studying the sample of that population to generalise (Creswell, 2009:145). In this study, primary data was collected from a sample of schools and Grade 12 learners in the Tshwane North District to identify information and factors influencing Grade 12 learners' choice of nursing as a career.

The researcher visited the schools after permission was granted by the Tshwane North district to explain the study and set the suitable date and time for the school and learners to collect data. The district office had already sent the approval of the study to all the schools in the district in memorandum form, as a result schools knew about the study even before the researcher visited the school. During the first visit, the researcher received the number of Grade 12 learners who selected Life Science as a subject and a date was set for data collection. The researcher printed the questionnaire according to the number of learners. The suitable time was arranged with the Life Science Teachers. Data was collected at schools during study period after class contact lessons. Teachers arranged the venue for the researcher.

The questionnaire was administered by the researcher. An information sheet was distributed to the respondents, which informed them about the study and their rights. Respondents were required to sign at the bottom of the information sheet if they agree to participate in the survey. Thereafter questionnaires were distributed to respondents who gave a written consent. Filled in questionnaires and consent forms were placed in separate boxes.

The focus was on the learners who took Life Science as a subject, which is one of the subjects required for entry into nursing college. The rationale for the selection of survey method was based on the availability of respondents, economy, turnaround time in data collection from a large sample and the source of information. A total of 362 Grade 12 learners was sampled. The Grade 12 learners were exposed to a set of questions related to information on nursing and on factors influencing their career choice, as the researcher assumed that

these learners should have a choice of many careers as per the LO curriculum. The results will be generalised to the Grade 12 learners in Gauteng North district schools.

3.5.1 Data collection tool/measurement tools

The research tool is an instrument the researcher uses to collect, manipulate or interpret data (Leedy & Ormrod, 2014:7). A structured questionnaire was developed by the researcher after conducting a literature review, and was based on the objectives of the study. The questionnaire consisted of closed questions where the respondents had to choose one and for some questions more than one response (Maree, 2016:18) Three sections, namely; Section A: Demographical data, Section B: Information provided to the learners about the nursing career and Sections C1 and C2: Factors influencing the career choice, was compiled, where C1 was completed by learners who may choose nursing as a career and C2 was completed by learners who may not choose nursing as a career. The questionnaire was developed to answer the two research questions, being: "What is the information given to Grade 12 learners on nursing as a career in the Tshwane North district schools and what are factors influencing the choice of nursing as a career amongst Grade 12 learners in the Tshwane North district schools?" The data collection instrument is attached in Annexure C. All questions in the data collecting instrument were coded with the aid of the statistician for easier translation of data into numbers.

3.5.2 Quality Control

3.5.2.1 Reliability

Reliability is the consistency with which a measure gives the same results that are accurate and stable over repeated observations (Bless et al., 2014:221; Terre-Blanche et al., 2009:152). The researcher went through the questionnaire with the learners to clarify any misunderstanding and to ensure that learners understood the questions, the same information was given to all the groups; no changes were made to the questionnaire. The questionnaire was formulated to answer the research questions having three sections namely: demographical data, the information given to Grade 12 learners on nursing as a career and factors influencing the choice of nursing as a career amongst Grade 12 learners. Cronbach's

alpha for reliability was used to confirm reliability of the data, using the rule of thumb as proposed by George and Mallery (2003) of >0.7 for reliability. A pilot study was conducted. The questionnaire was adjusted for the main study.

3.5.2.2 Validity

Validity relates to how accurately a measure measures what it supposed to measure (Macnee & McCabe, 2008:424; Leedy & Ormrod, 2014:91). In this study, face validity and content validity were ensured.

Face validity is the extent to which an instrument appears to measure what it is supposed to measure; the instrument should be validated by experts in the field (Maree, 2016:240). The questionnaire included demographic details, information on nursing as a career and factors that contributed to choose or not to choose nursing as a career to cover the aim of the study to identify information and factors influencing Grade 12 learners' choice of nursing as a career in the Tshwane North district schools. Face validity was confirmed by the peer reviewers during the development of the questionnaire that learners could easily respond to it.

Content validity is the extent to which an instrument covers the complete content of the construct it set out to measure (Maree, 2016:240). Content validity is the extent to which a measure reflects content, the measuring tool must include all the relevant content to be measured (Terre-Blanche et al., 2009:149). In this study, the content of the questions to answer the research questions was verified with nurse educators working at the NEI and with the research supervisors to describe the information given to Grade 12 learners on nursing as a career in the Tshwane North district schools and to describe factors influencing the choice of nursing as a career amongst Grade 12 learners. The questions were based on basic information provided on nursing as a career and factors influencing the learners' career choice.

3.6 PILOT STUDY

A pilot study is the small-scale research study that tests the method to be used in a larger study; it demonstrate the effectiveness and validity of measuring instrument and method. It is administered to a small group of respondents from the intended population (De Vos et al., 2011:237; Macnee & McCabe, 2008:267). A pilot study is used to identify possible problems, the actual questionnaire is administered and data analysed for inconsistencies, gaps and flaws in the data collection instrument (Terre-Blanche et al., 2009:490). Twenty (20) learners from the sample for the main study were sampled for the pilot study, but did not take part in the actual study. This ensured that the instrument and data collection process was valid and reliable in line with the aim of the study. Subsequently, the questionnaire was adjusted to incorporate lessons learnt during the pilot survey. The question on the educational level of the parents was removed, as learners did not answer the question. The instruction on Section C was modified to give a clearer instruction.

3.7 DATA ANALYSIS

Data analysis is the organising and compiling of data information, summarised and described (Macnee & McCabe, 2008:25). calculated by the statistician who has been consulted. The collected data was coded to make it amenable to computer analysis. The questionnaires were numbered as soon as they were received and they were kept safe.

The data was captured and stored on a designed Excel spread sheet. Validation and exploration of data was performed to check for inconsistencies in captured data. A coding system was developed and subsequently implemented. The data was coded and analysed by using the statistical package (SAS). See the codes of the questionnaire in Table 3.2 below.

Table 3-2 Questionnaire coding

QUESTIONNAIRE CODING			
Demographic data	Information on Nursing	Factors Influencing Career Choice	
		Considering nursing	Not Considering Nursing
QA 1	QB1	QC11.1	QC21.1
QA2	QB2	QC11.2	QC21.2
QA3	QB3.1	QC11.3	QC21.3
QA4	QB3.2	QC11.4	QC21.4
QA5.1	QB3.3	QC12.1	QC22.1
QA5.2	QB3.4	QC12.2	QC22.2
QA6	QB3.5	QC12.3	QC22.3
	QB3.6	QC12.4	QC23.1
	QD3.7	QC12.5	QC23.2
	QB4	QC12.6	QC23.3
	QB5	QC12.7	QC23.4
	QB6	QC12.8	QC23.5
	QB7	QC12.9	QC23.6
	QB8	QC13.1	QC23.7
	QB9.1	QC13.2	QC23.8
	QB9.2	QC13.3	QC23.9
	QB9.3	QC13.4	QC24.1
	QB10	QC13.5	QC24.2
	QB11.1	QC13.6	QC24.3
	QB11.2	QC13.7	QC24.4
	QB11.3	QC14.1	QC24.5
	QB11.4	QC14.2	QC24.6
	QB11.5	QC14.3	QC25.1
	QB11.6	QC14.4	QC25.2
		QC14.5	QC25.3
		QC14.6	QC25.4
		QC15.1	QC26.1
		QC15.2	QC26.2
		QC15.3	QC26.3
		QC15.4	QC26.4
		QC15.5	QC26.5

The Chi-square test (χ^2) for equal proportion technique was performed on the data to analyse the closed-ended questions (quantitative data). This provided frequencies (the actual number of respondents who chose each response and percentages (the proportion of people who chose each response out of the total number of respondents). In addition, the Chi-square test (χ^2) was used to test for independence in a two-way contingency table as well as to compare the achieved sample proportions for the categories of variables of the quantitative data, such demographics data (Holt, Scott & Ewings, 1984:55). Descriptive statistics were computed to reveal the characteristics of the sample and to describe the study variables. Data was summarised in graphic displays, charts and tables to give descriptive interpretation (De Vos et al., 2011:254; Leedy & Ormrod, 2014: 226).

3.8 CONCLUSION

This chapter discussed the research methodology used in the study. The study used a quantitative descriptive design and survey method. Sampling was conducted in three stages to sample a district, eight schools and the respondents. A pilot study was conducted. Data was statistically coded for information to be statistically analysed and presented in graphs and tables, to describe the information provided to Grade 12 learners on nursing as a career and to describe factors influencing the choice of nursing as a career amongst Grade 12 learners in the Tshwane North district schools. The next chapter presents and discusses the results.

CHAPTER 4

PRESENTATION OF RESULTS

4.1 INTRODUCTION

The last chapter outlined the methodology adopted in the study and this chapter presents the results of the study. The purpose of the study was to identify and describe the information given to Grade 12 learners on nursing as a career in the Tshwane North district schools and to describe factors influencing the choice of nursing as a career amongst Grade 12 learners in the Tshwane North district schools. The research results are presented based on the objectives of the study. Data was collected in the Tshwane North District from August 2016 to March 2017 from eight secondary/high schools. A questionnaire was used to collect data from 362 randomly selected respondents from eight sampled schools. Descriptive statistics reporting such as graphs and tables were used. The questionnaire had three sections and 93 questions. Results reporting, interpretation and discussions are based on the questionnaire sections and questions. Similar questions were grouped together.

4.2 DEMOGRAPHIC ANALYSIS

Demographical data reported in this section included; school, age, gender, race, home language and the occupation of parents. A Chi-square test was used to determine if there is any relation between the demographics and the learners' preference of nursing as a career.

4.2.1 Schools distribution

The district that was included in the study was Tshwane North District. Out of thirty-two schools, only eight were selected. Schools that took part in the study are illustrated in Figure 4.1 below. The analysis included the association of the choice of nursing as a career.

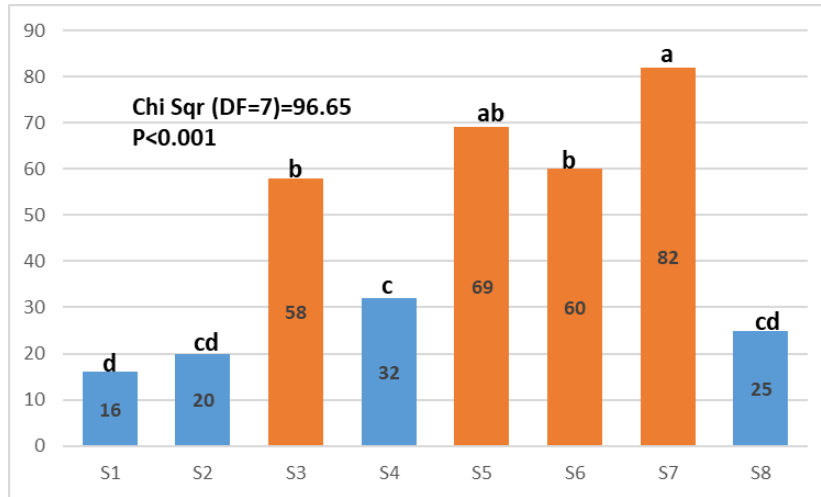


Figure 4-1 Schools that participated in the study

Only learners who took Life Science as a subject participated in the study. Figure 4.1 gives an indication of how the questionnaires were distributed among the schools. Of the 362 respondents 16 (4%) were from S1, 20 (6%) were from S2, 58 (16%) were from S3, 32 (9%) were from S4, 69(19%) were from S5, 60 (17%) were from S6, 82 (23%) were from S7 and 25 (7%) were from S8. The pairwise proportional comparison categorised the schools into two groups with school 7 (S7) being highly significantly to S1, S2, S4 and S8 with $X^2(7, N = 362) = 96.65, p < 0.05$. The first group was schools that have more than 50 learners who participated in the study and the second group was schools with less than 50 learners who participated in the study. These results depend on the total number of learners enrolled in schools, the number of learners per classroom as well as the area within which the school is situated. If these learners were to apply to a nursing college, more learners will be from schools with a high number of learners taking Life Science as a subject.

Table 4-1 Association between schools and nursing career choice

	S1	S2	S3	S4	S5	S6	S7	S8	Chi-squared value	Prob
No	13 (3.59%)	13 (3.59%)	17 (4.70%)	14 (3.87%)	32 (8.84%)	24 (6.63%)	32 (8.84%)	12 (3.31%)	19.21	0.0076
Yes	3 (0.83%)	7 (1.93%)	41 (11.33%)	18 (4.97)	37 (10.22)	36 (9.94)	50 (13.81)	13 (3.59)		

The results in Table 4.1 above indicate that there was a significant association between schools and learners' choice of nursing as a career $\chi^2(7, N = 362) = 19.21, p < 0.05$. Schools did not have the equal number of learners in Grade 12 who selected Life Science and English as subjects as evidenced in Figure 4.1 above. The number of learners enrolled per school had an influence on the choice of nursing as a career as shown in Table 4.1. For instance, S3 (11.33%), S5 (10.22%), S6 (9.94%) and S7 (13.81%) had more learners who chose nursing as a career as compared to S1 (0.83%), S2 (1.93%), S4 (4.97%) and S8 (3.59%). The higher the number of learners in the school, the bigger the chance of selecting nursing as a career

4.2.2 Age distribution

To assess the age distribution, learners answered the question "What is your age?" A total of 182 (78%) learners were 18 years and 19 years of age, as shown in Figure 4.2. There was a statistically highly significant difference between the ages with a probability of $p < 0.001$ and a Chi Sqr (DF=4) = 247.67.

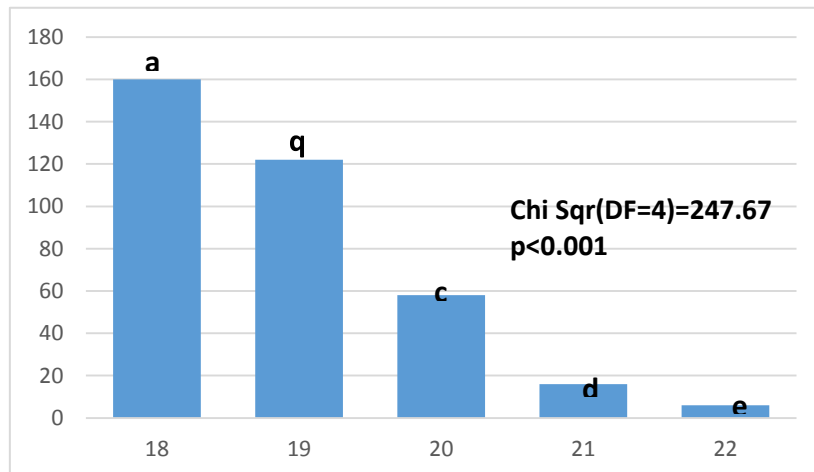


Figure 4-2 Ages of Respondents

The age to start school in South Africa is 6 years, which means that the learner will celebrate her or his 7th year in Grade 1. Therefore, at 18 years most learners are in Grade 12. The 18 years age distribution is a true reflection that most learners did not enter basic education at an age older than 6 years or have not repeated a Grade. At 18 years, learners are adults and can make informed decisions on career choices,

even though research indicate that teachers, parents and significant others have an influence, specifically on the learners' choice of career such as nursing. High school learners are expected to have made a career choice by Grade 10 and 11 when they are 16yrs to 17yrs, and apply to the Higher Education Institutions (HEIs) and Further Education and Training (FETs) in Grade 12 at 18yrs (DBE, 2012:8).

Most learners who would enter the nursing programme were likely to be 18yrs or 19yrs of age. This is in accordance with Super's Exploration stage (Table 4.2 below) of career development, a stage where learners need more information on careers as they are still exploring careers (Ortlepp et al., 2002:46), where career exploration requires that individuals actively seek information from various sources.

Table 4-2 Super's Life Span and Developmental stages

Stage	Age	Characteristics
Growth	birth-14	Development of self-concept, attitudes, needs and general world of work
Exploration	15-24	"Trying out" through classes, work hobbies. Tentative choice and skill development
Establishment	25-44	Entry-level skill building and stabilisation through work experience
Maintenance	45-64	Continual adjustment process to improve position
Decline	65+	Reduced output, prepare for retirement

Table 4-3 Association between age and nursing career choice

Nursing choice	18yrs	19yrs	20yrs	21yrs	22yrs	Chi-squared value	Prob
No	77 (21.27%)	51 (14.09%)	21 (5.80%)	4 (1.10%)	4 (1.10%)	6.33	0.176
Yes	83 (22.93%)	71 (19.61%)	37 (10.22%)	12 (3.31%)	2 (0.55%)		

In this study, there was no evidence of association between age and learners and nursing preference. Even though the ages differed, it did not have any effect on the learner's choice. Looking at all ages there was no significant differences between the learners' preference of choosing nursing as a career, $\chi^2(4, N = 362) = 6.33, p > 0.05$.

4.2.3 Gender of respondents

Both male and female learners were invited to take part voluntarily. It became evident that 58% of the learners were females, based on results represented in Figure 4.3. The number of respondents in the study were; females (209 - 58%); males (153 – 42%). Female respondents were slightly more than males respondents, 58% and 42% respectively, this was supported by Statistics SA of 2011 with 51 per cent females and 49 per cent males. In this study, 58% of females would apply for the nursing programme should they be interested in the nursing as a career than the 42% males. Should more learners from the district apply for nursing programme, the NEI may have more females than males and this will be in line with the study conducted by Eman, Cowman and Edgar (2012:89) who identified low representation of male students in the nursing program.

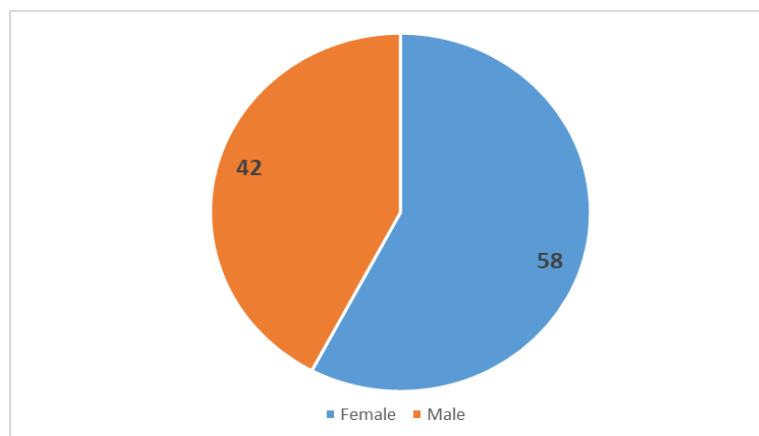


Figure 4-3 Gender of Respondents

Table 4.4 represents the association between gender and nursing choice from the data. There is no significant association between gender and the learners preference of nursing as a career. This means that the gender of the learners did not have influence on the choice of the learners.

Table 4-4 Association between gender and nursing choice

Nursing choice	Female	Male	Chi-squared value	Prob
No	91 (25.14%)	66 (18.23%)	0.0059	0.9390
Yes	118 (32.60%)	87 (24.03%)		

Even though there is no significance association of gender and the choice of nursing in the study, Table 4.5 represents a different picture in Gauteng Province.

Table 4-5 SANC distribution of manpower in Gauteng province as at 31 December 2015

Gender	Population estimates 2015	Nursing Manpower as at 2015/12/31				In Training 2015/12/31		
		Registered	Enrolled	Auxiliaries	Total	Students	Pupils	Pupil N/A
Females	6 547 053	33308	16134	17971	67413	3605	6194	3585
Males	6 653 296	2462	1335	1207	5004	893	571	232
Totals	13 200 349	35770	17469	19178	72417	4498	6765	3817

Furthermore, the distribution of manpower in Gauteng province by the end of 2016 as shown in Table 4.5 (SANC, 2016:2) confirmed that there are more female nurses than male nurses.

4.2.4 Race Distribution

Figure 4.4 represents the race of the respondents. Tshwane's population is predominantly black Africans, representing 2, 2 million people, followed by the White population of approximately 600 000 people, 59166 Coloured individuals and 51 547 Asian individuals (StatsSA, 2011). The respondents were compatible with the StatsSA population results of 2011 with 328 (90.86%) blacks, 1 (0.28%) coloureds, 1 (0.28%) Indians and 31 (8.59%) were white, and 1 did not indicate the race. Most of the learners from the eight schools were Black.

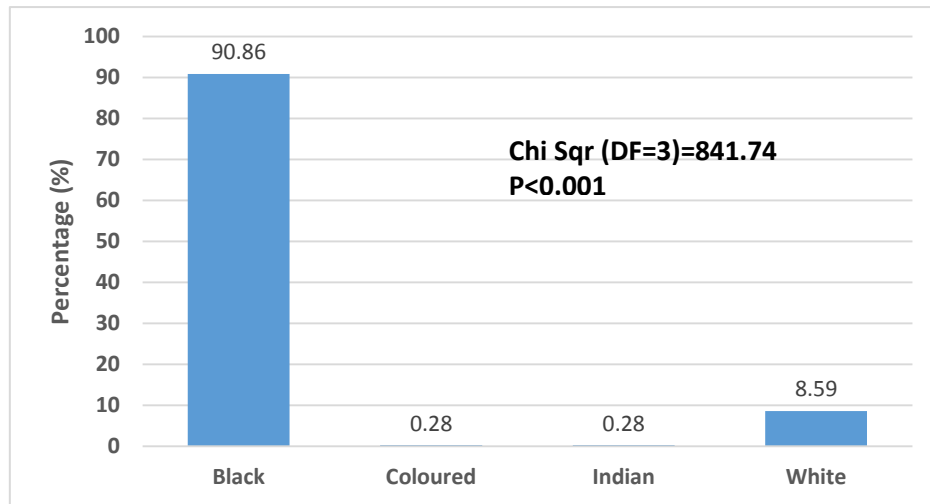


Figure 4-4 Race of Respondents

The results show that more Black learners may enter the nursing career from the district studied. The schools that were sampled were in the Tshwane North District, the Black population have access to six of the sampled schools and few had access to the two city schools. The race distribution is therefore a reflection of the selected race groups that access the selected schools. Race and choosing nursing as a career did not have any significant association as illustrated in Table 4.6.. The probability value is higher than 0.05 with $X^2 (3, N = 362) = 4.61, p>0.05$.

Table 4-6 Association between race and nursing career choice

Nursing choice	Black	Coloured	Indian	White	Chi-squared value	Prob
No	137 (37.95%)	1 (0.28%)	1 (0.28%)	17 (4.71%)	4.61	0.2023
Yes	191 (52.91%)	0 (0%)	0 (0%)	14 (3.88%)		

The decision-making process of Black learners is influenced by their friends at school' (Lubbe & Petzer, 2013:932). The results show that more Black learners may enter the nursing career from the district studied.

4.2.5 Parents' occupation

The occupation of parents determines the socio-economic status of the respondents. (see Figure 4.5). The occupation of respondents' fathers were as follows; 60 (19%) were domestic workers, 28 (9%) were factory workers, 59 (18%) were professionals, 30 (9%) were self-employed and 144 (45%) were unemployed. The occupation of respondents' mothers were as shown in Figure 4.6 was as follows; 9 (4%) were domestic workers, 43 (17%) were factory workers, 73 (29%) were professionals, 37 (15%) were self-employed and 86 (35%) were unemployed. Forty-one respondents did not indicate the occupation of their fathers' occupations and 114 respondents did not indicate the occupation of their mothers' occupations. The reason may be that these respondents are raised by single parents or are orphaned.

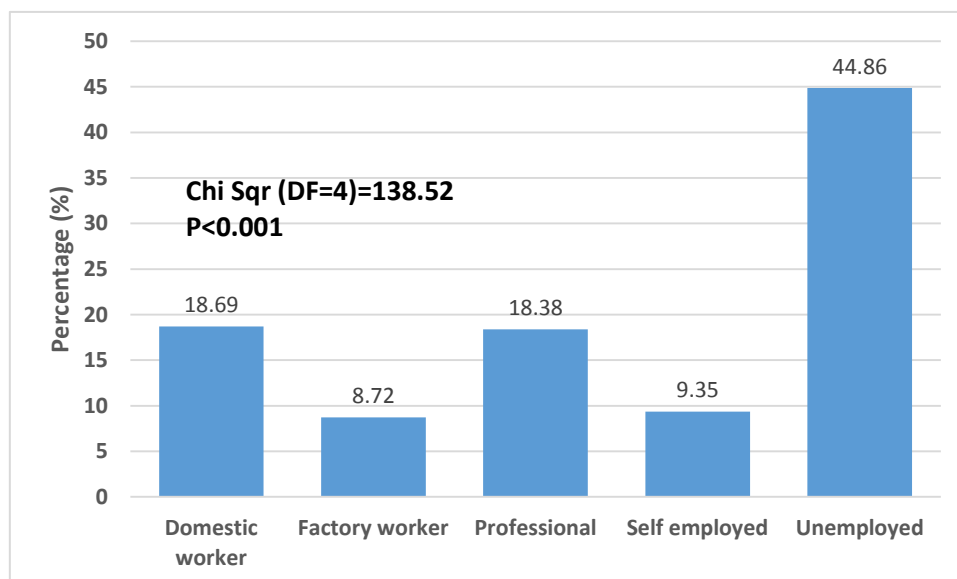


Figure 4-5 Fathers' Occupations

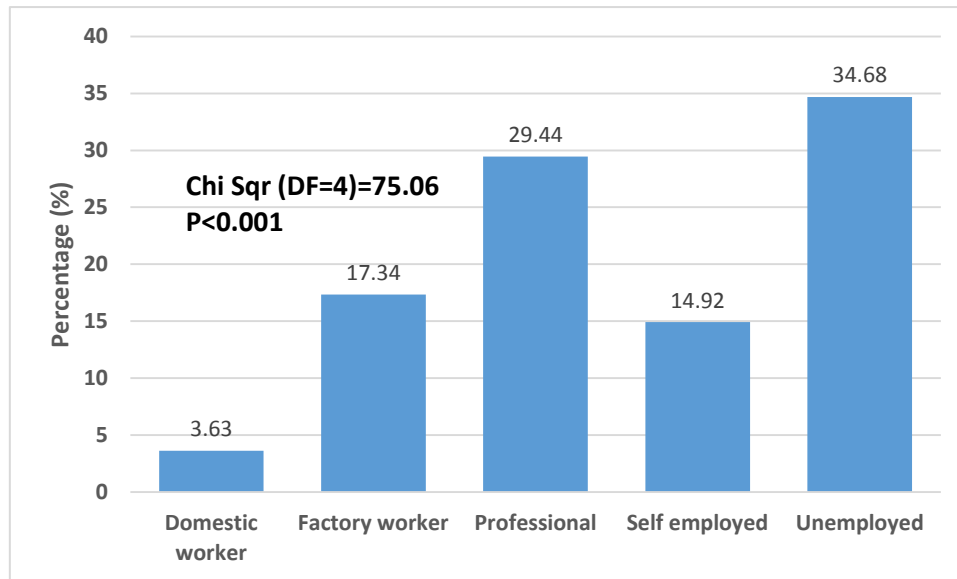


Figure 4-6 Mothers' Occupations

The parents of most respondents were unemployed, as shown by Figure 4.6 and 4.7. It is apparent that many learners' parents fall into the low socio-economic group, these learners will not be able to afford tertiary education fees unless they can receive scholarships and bursaries (Ortlepp et al., 2002:46). Learners with a low socio-economic status may apply to the nursing college, as all students get a stipend. Dal et al. 2009 in Wu, Low, Tan, Lopez and Liaw (2015: 558), cited that there is a significant association between lower socio-economic class and choosing nursing studies. This was alluded to by Mkhize and Nzimande (2007:12), who state that poorer learners may be attracted to nursing by the fact that they are paid while studying as they depend on their parents for funding of their education. In their study, Mkhize and Nzimande (2007:15) and Cho et al. (2010:1840) also identified that nursing students had a relatively lower household income than non-nursing students. Students chose nursing as a career for employability and job security.

4.2.6 Area where respondents live

In this study, of the 362 respondents, 56 (16.47%) live the city, 39 (11.47%) live in the informal settlements, 110 (32.35%) live in rural areas and 135 (39.71%) live in semi-rural areas, while 22 respondents did not indicate the area they live.

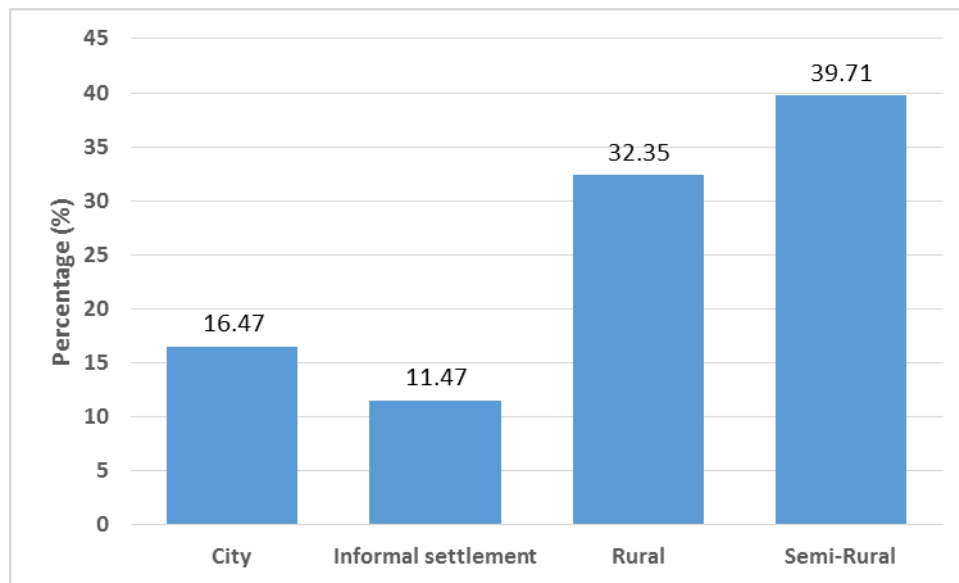


Figure 4-7 Area where respondents live

Figure 4.7 illustrates that many respondents live in semi-rural and rural areas. Should these learners decide on nursing as a career, more learners will be from semi-rural and rural areas. This confirms that 67.57% of learners from rural areas may consider nursing as a career as compared 32.43% from urban schools (Ogunyewo, Afemikhe, Ajio & Olanlesi-aliu, 2014:28).

Learners have access to a variety of career events outside of school in the form of career exhibitions and career talks with people working in a nursing field. These events are usually more accessible to schools in city/urban areas and learners from rural areas are neglected (SAQA, 2012:34), therefore learners from the rural areas may not receive the same career information on nursing as their counterparts in the city.

Table 4.7 below represents the association between area and nursing career choice which contrasts (Ogunyewo, et.al, 2014:28). There is no evidence of significant association between the area where learners come from and choice of nursing as a career with $\chi^2(3, N = 362) = 3.84, p > 0.05$. The choice of nursing as a career is independent from the areas the learners live

Table 4-7 Association between area and nursing career choice

Nursing choice	City	Informal Settlement	Rural	Semi-Rural	Chi-squared value	Prob
No	31	15	45	61	3.84	0.2794
Yes	24	25	65	74		

4.3 INFORMATION PROVIDED TO THE LEARNERS ABOUT THE NURSING CAREER.

4.3.1 Learners who have received information on nursing

Figure 4.8 illustrates the number of respondents who has received information on nursing as a career previously. A total of 195 (55.4%) of respondents cited “no” they had not received information on nursing career, whilst 157 (44.6%) respondents cited “yes” they had previously received information on nursing as a career.

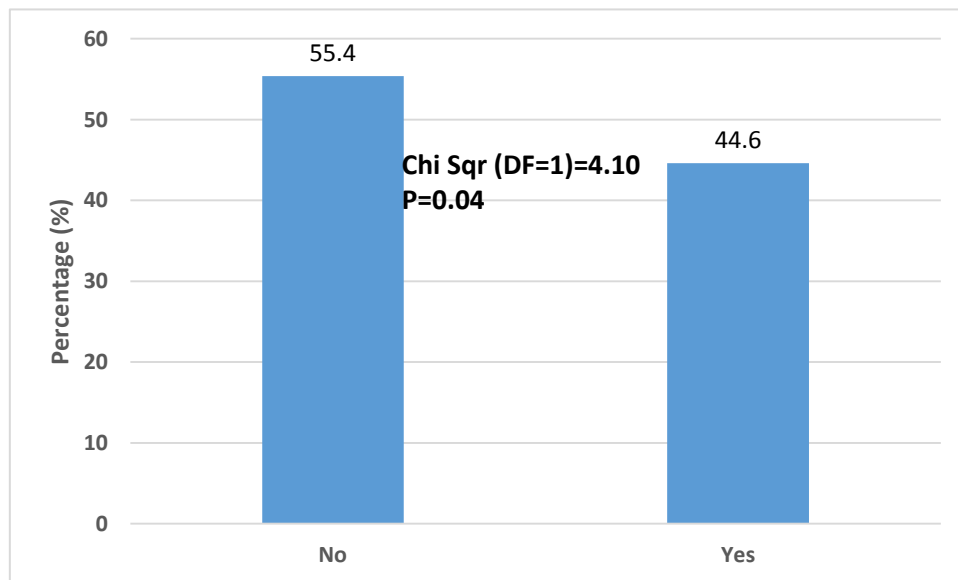


Figure 4-8 Respondents who recieved information on nursing career career

More learners did not receive information on nursing as a career. It is apparent from Figure 4.8 that the number of Grade 12 learners who had no information on nursing

as career was higher than those who had information. Provision of information and exposure to the career influence the career choice, Auerbach et. al, (2011:2290). Information about the opportunities in nursing appear to have influenced the career choices amongst learners, as confirmed by Dante, Graceffa, Del Bello, Rizzi, Landerca, Battistella, Bulfone, Grando, Zuliani, Casetta & Palese (2014:503). Dunnion, Dunnion and McBride (2010:464), also found that information about the opportunities in nursing appear to have influenced the career choices amongst learners, his was the view of that most recruits who chose nursing as a career had attended the joint Health Service Executive and college information sessions, where learners confirmed that these sessions were informative and provided good insight into the nursing course.

4.3.2 When was the information received?

Figure 4.10 gives the results of when information on nursing was received, focusing the question only on learners who received nursing information (157 respondents),

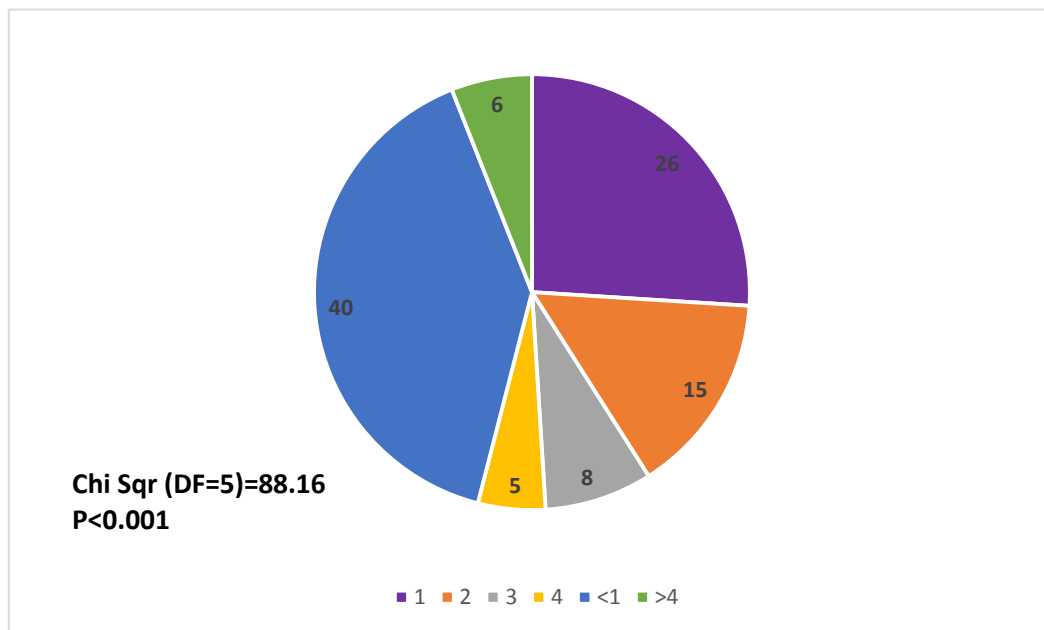


Figure 4-9 Years when information was received

Out of 157 learners, 103 (66%) learners received information 1yr or less ago as compared to 34% who received information 2yrs and more ago. The information of 66 per cent of respondents who received information a year ago and less, their may have

been relatively recent as compared to those who received information more than 2yr ago. These learners might still remember the information provided.

4.3.3 Source of information

Some of the respondents gave more than one source of information on nursing as career as shown in Figure 4.10 The question was only asked to 157 respondents who received nursing information, as it did not affect the respondents who never received any information about nursing. Most learners received information from career exhibitions 29(19%), nurses 35(23%), relatives 26(17%), teachers 24(16%), their mothers 16(10%), media 16(10%), relative and career exhibition 3(2%). Media and career exhibition 3(2%) and father 2(1%) and 3 did not respond. These sources had an influence on learners choosing nursing as a career. The results show the statistical significance for information on subject choice with Chi Sqr (DF=8)=71.12 P<0.001 which is less than the significant value of p<0.05.

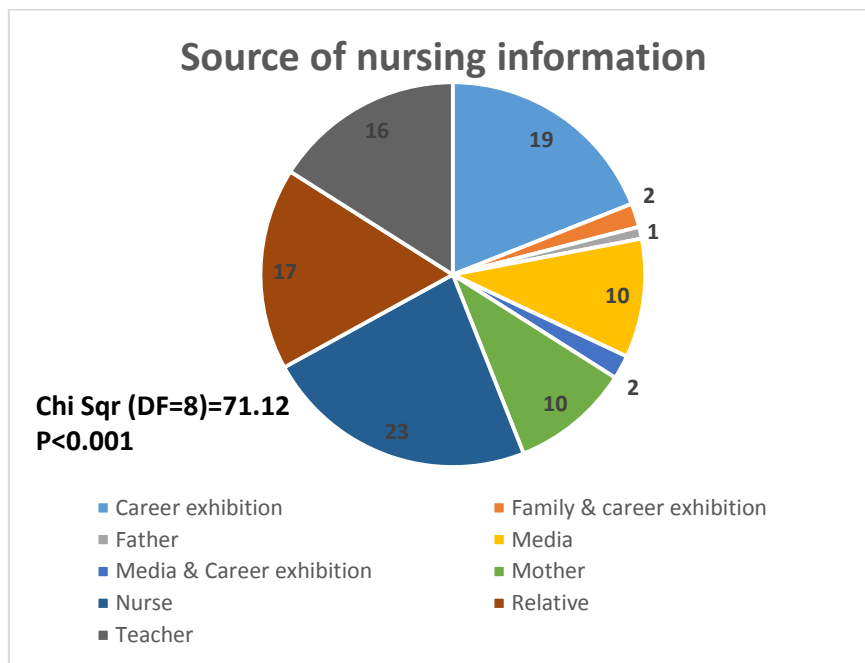


Figure 4-10 Source of nursing information

This tallies with Dante et al. (2012:131) and Achilles (2010:15) that significant others (relatives and friends) were the principal source of nursing knowledge. In contrast, Dal et al.2009 cited in Wu, Low, Tan, Lopez & Liaw, (2015: 558) found that the influence

of family was rated lower.

Media and career exhibitions was found to be the source of information in this study. Dunnion et al. (2010:462) acknowledged that career exhibitions and the media helped learners to make the decision to choose a course in nursing.

A total of 25 (23%) respondents responded that nurses were sources of information, this is congruent with Hoke (2006:98) and Achilles (2010:15) that nurses might have been a source of information through presentations and role modelling to the learners.

4.3.4 Informed about subject choice

Again, this question was only asked to 157 respondents who received nursing information, 116(75%) of learners were informed about the subject choice relevant for nursing career, 39(25%) were not informed and two learners did not respond to the question. The results show the statistical significance for information on subject choice with Chi Sqr. (DF=1) =38.25, $p < 0.001$, which is less than the significant value of $p < 0.05$.

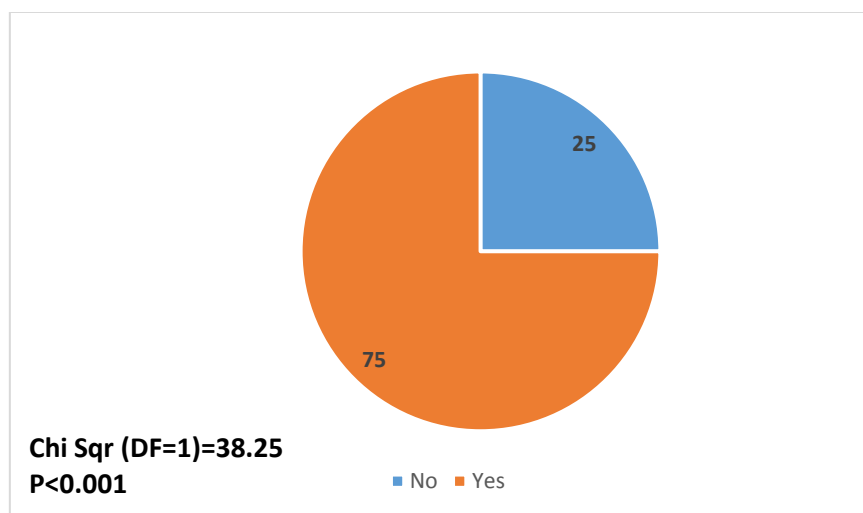


Figure 4-11 Respondents who received information on relevant subjects

Majority of learners 116(75%) who were informed about the subject choice indicated that the sources of information had knowledge about subject choice in nursing career. Should these learners choose to follow the nursing programme, they stand a better chance of being selected as they would meet the requirements. This supports the

previous findings that students who studied biology considered nursing as a career. (Law & Arthur, 2003:29).

4.3.5 Adequacy of information given

Figure 4.12 represents the adequacy of the information received. The question was only answered by 157 (45%) out of 362 respondents which translates to 45% of the population. Of the 157 respondents, 98(64%) were satisfied and felt that the information provided was adequate, 55(36%) felt that the information provided was not adequate and 4 learners did not respond to the question. The results show the statistical significance for information on subject choice with Chi Sqr. (DF=1) =12.09, $p < 0.0005$, which is less than the significant value of $p < 0.05$.

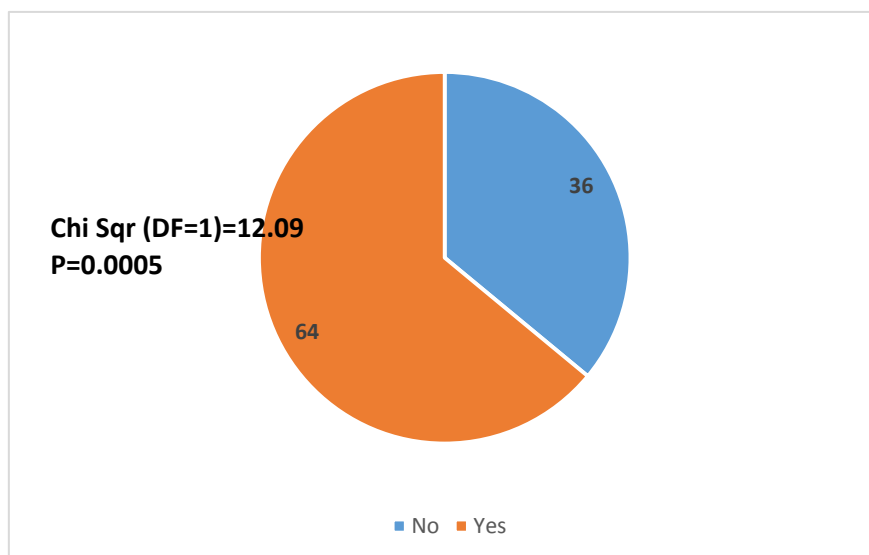


Figure 4-12 Adequacy of information received

The adequacy of information on nursing as a career may be the reason for choosing nursing as a career. Learners who were satisfied with the information may choose nursing as a career as they stand a better chance of making an informed decision. Furthermore, Grainger and Bolan (2005:40) revealed that the learners' orientation towards nursing was higher at the end of the nursing program than at the beginning, which confirms that the orientation towards nursing will encourage learners to apply or choose the nursing career.

4.3.6 Category of nurses

In South Africa, there are currently three entry level categories of nurses; auxiliary nurses, enrolled nurses and professional nurses (DoH, 2013:21) In this study, 186 (56%) respondents were not sure about the categories of nursing, 62 (19%) thought there were only two categories, 48(15%) indicated that there are three categories and 34 (10%) indicated one category of nursing. Thirty learners did not respond to the question. The results show the statistical significance for category of nurses with Chi Sqr. (DF=3) =177.88, $p < 0.001$, which is less than the significant value of $p < 0.05$.

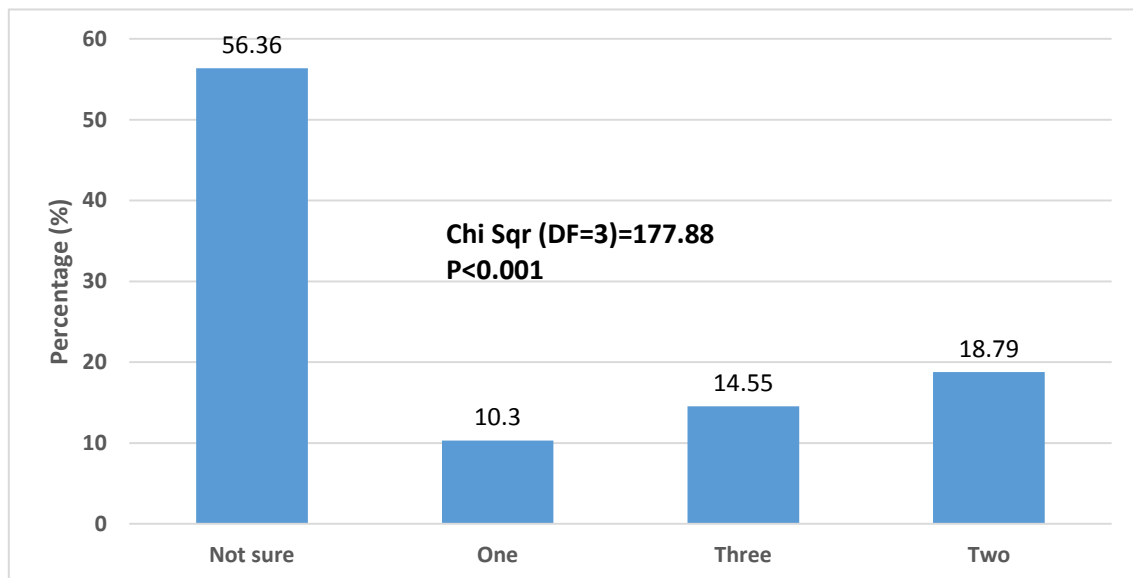


Figure 4-13 Categories of nursing knowledge

This illustrates that although some learners did receive information on nursing as a career, only 15 per cent knew that there are three categories of nurses, which confirms the lack of adequate information about nursing as a career. Mmema (2010:95) stated that the career choices of Grade 12 learners in rural schools are based on inadequate information, and share the view that information learners have about nursing was not accurate (Dante et al., 2013:131).

4.3.7 Duration of training to become a professional nurse

The training and education of student nurses in South Africa, as approved by the South African Nursing Council (SANC) as the basic programme of education and training, leading to registration as a nurse (general, psychiatric and community) and a midwife (Regulation R.425, paragraph (ii) 1985 as amended), takes four years. The findings of the study showed that 195 (58%) of learners were not sure about the duration of nurse training, and 81(24%) knew that the duration of nurse training is 4yrs, 45(13%) thought that the duration is three years and 13(4%) indicated that the duration is one year. Twenty-eight learners did not respond to the question. The results show the statistical significance for the duration of nurse training with Chi Sqr. (DF=3) =226.24, $p<0.001$, which is less than the significant value of $p<0.05$.

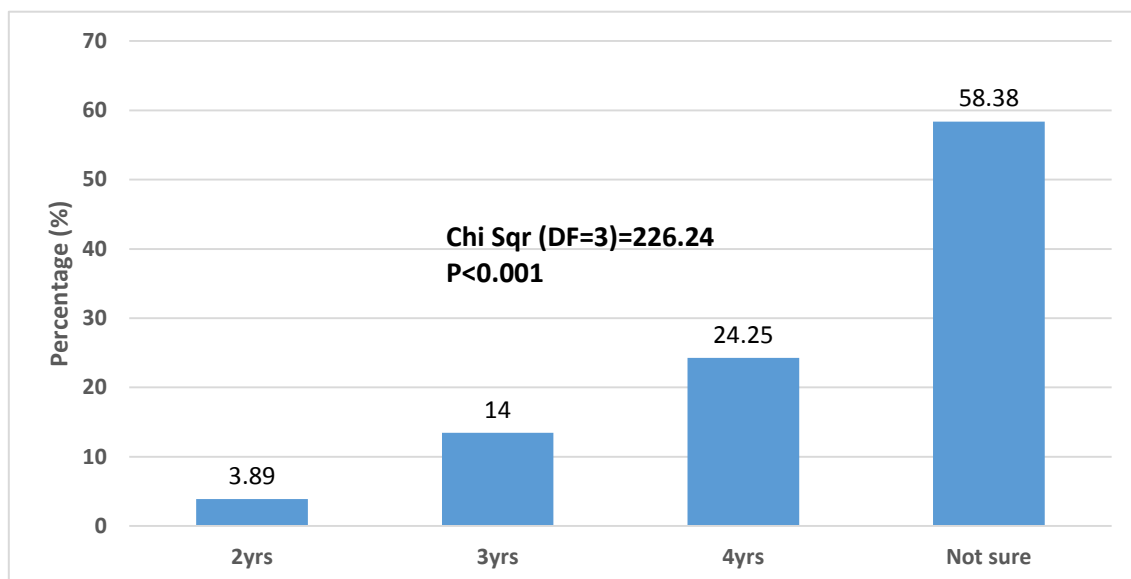


Figure 4-14 Duration of professional nurse training

This illustrates that although some learners did receive information on nursing as a career, 56.38% of learners were still not sure about the duration of training to become a professional nurse. It is evident that the information provided was inadequate. Should they choose nursing as a career, the choice will be an uninformed choice. Sources of information to learners on nursing as a career seemed inadequate from, as indicated in Figure 4.15. This is in accordance with Neilson and McNally (2013:209), who stated that information and views from significant others on nursing seemed

inadequate.

4.3.8 Nurses as independent practitioners

Of the 362 respondents, 205 (62%) knew that nurses can be independent practitioners and 124 (38%) did not know this. Thirty-three respondents did not respond. The results show the statistical significance for nurses as independent practitioners with Chi Sqr. (DF=1) =20.91, $p < 0.001$ which is less than the significant value of $p < 0.05$.

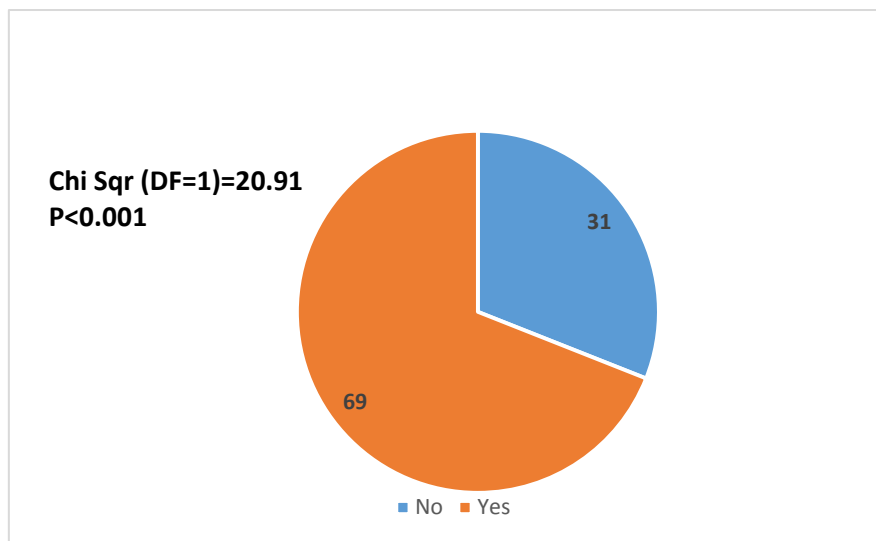


Figure 4-15 Nurses as independent practitioners

Figure 4.15 represents the information on nurses as independent practitioners. 103(69%) of the respondents were aware that nurses can be independent practitioners, as was the view of Achilles (2010:16), who found that learners were aware of most of the issues regarding the profession. This is in contrast to Hoke (2006:98), who said that learners did not know that nurses are independent practitioners. This is supported by Meiring and Van Wyk (2013:13), who found that the public might not understand the complexities of nursing as a career. The information in Section 4.3.8 about nurses as independent practitioners does not correspond with the findings in Section 4.3.9, in that nurses work under the supervision of doctors, learners may have guessed the answers and not from informed information.

4.3.9 Nurses work under the supervision of doctor

Of the 362 respondents, 270 (79%) did not know that nurses do not work under the supervision of doctors, only 69 (21%) as evidenced in Figure 4.16, had the knowledge and 34 respondents did not respond. The results show the statistical significance for nurses working under the supervision of doctors with Chi Sqr. (DF=1) =50.13, $p < 0.001$, which is less than the significant value of $p < 0.05$.

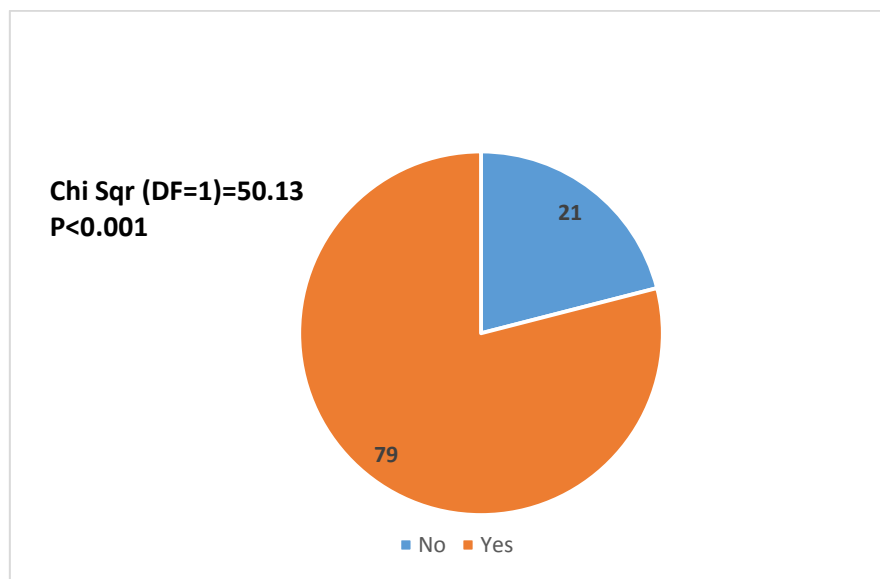


Figure 4-16 Nurses work under the supervision of doctors

Karabacak, Uslusoy, Alpar and Bahcecik (2012:541) concluded that society perceives nurses as doctors' assistants, and this indicates that the image of the profession is culturally affected as well as reflecting societal prejudices. This view was confirmed by Glerean, Hupli, Talman and Haavisto (2017:98), who state that this is a sign that although some learners were provided with information on nursing as a career, it seems the information was not adequate and this lack of information might deter learners from nursing as a career. This study is congruent with Whitehead, Mason and Ellis (2007:495), who found that learners have a very limited view of nursing as a career; this showed their lack of knowledge about nursing as a career. This corresponds with Katz et al. (2010:11), who found that students regard nursing as having a lower status than medicine and view nurses as the doctors' assistants, with nurses only following doctors' orders. Meiring and Van Wyk (2013:13) also alluded that there is still a perception that

nurses are assistants to the physicians.

4.3.10 Where nurses can work

Figure 4.17 and Figure 4.18 below shows the respondents' knowledge of universities and industries as places of work for nurses. There was no difference among the learners who received information on nursing as a career and those who did not with regards to their knowledge of other places where nurses can work. Learners were not aware that nurses can work in industries and at universities.

The majority of learners responded that nurses can work at clinics, hospitals and old age homes, 313, 302 and 191 respectively, this shows the limited information that learners has about where nurses can be employed. 17.2% of learners who received information on nursing career knew that nurses can work at the universities and 16.1% of those who did not receive information on nursing knew that nurses can work in the universities. In Figure 4.18 below, 8.72% of learners who received information on nursing career knew that nurses can work at the industries and 7.01% of those who did not receive information on nursing knew that nurses can work in the industries.

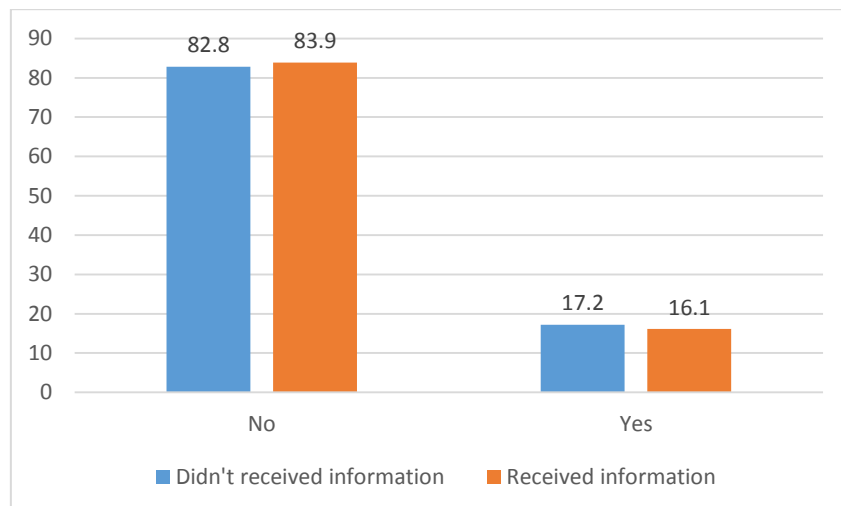


Figure 4-17 University as a place of work for nurses

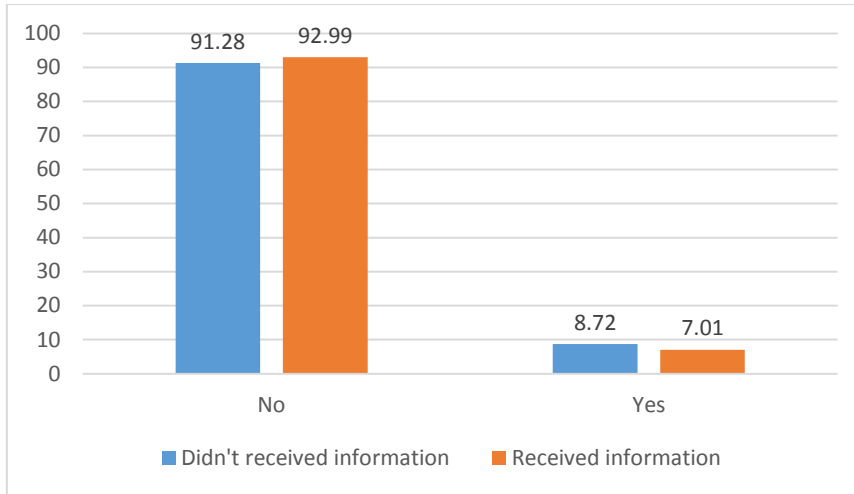


Figure 4-18 Industries as a place of work for nurses

4.3.11 Where can nurses train?

Figure 4.19 illustrates the response of all learners regarding where nurses can train. Of the 362 respondents, 91(26%) knew that nurses can train at nursing college, private nursing college and university, and 307(87%) knew that nurses can receive training at a nursing college. 10 learners did not respond. The results show the statistical significance for where nurses can train with Chi Sqr. (DF=6) =139.51, $p < 0.001$, which is less than the significant value of $p < 0.05$.

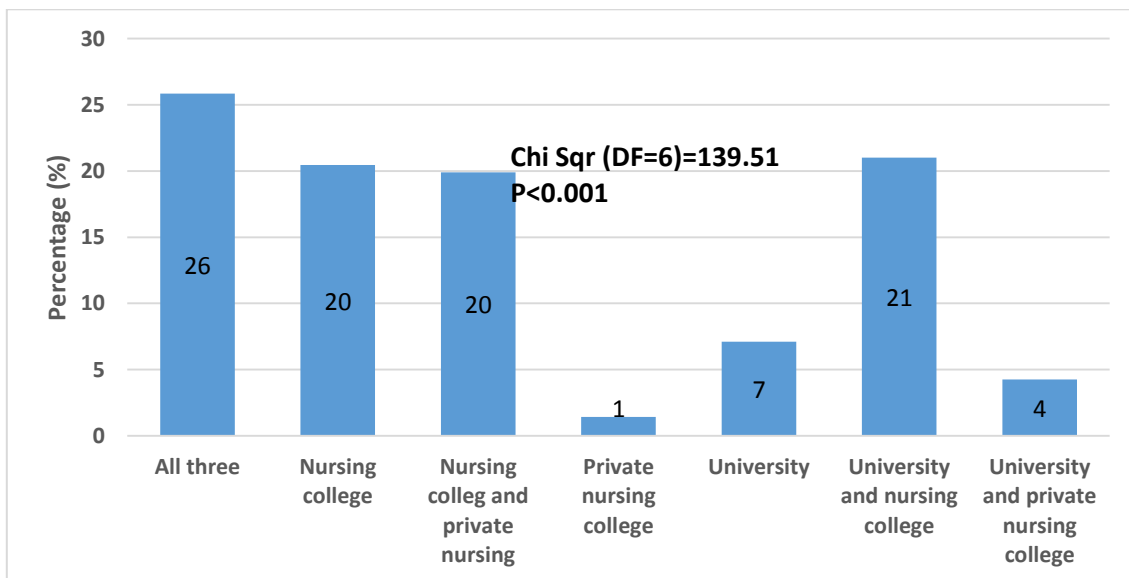


Figure 4-19 Where nurses can train by all learners

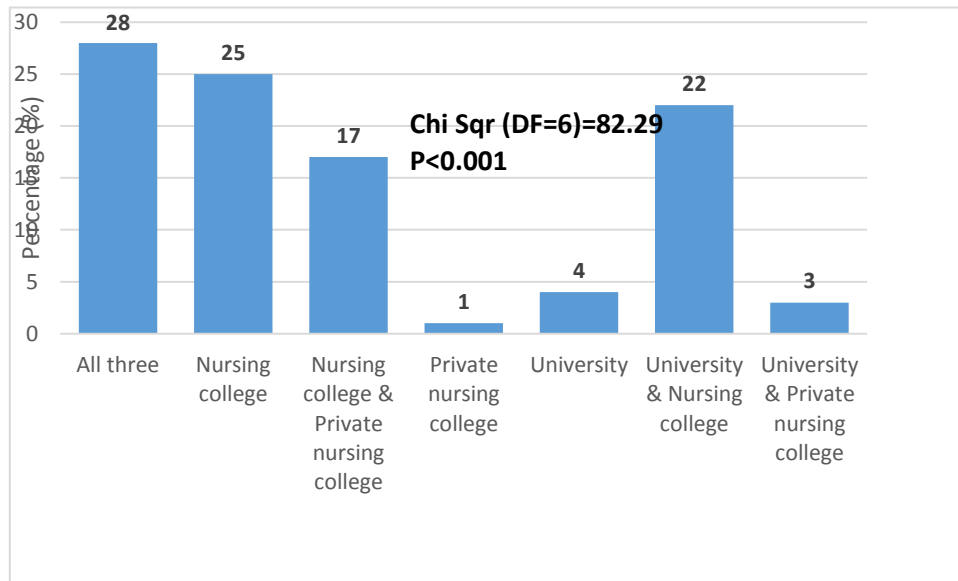


Figure 4-20 Institutions where nurses can train

Figure 4.20 illustrates the response from learners who had information on nursing career regarding the institutions where nurses can train. Of the 157 respondents 44 (28%) knew that nurses can train at the all three institutions namely nursing colleges, universities and private nursing colleges, 39 (25%) knew that nurses can train at nursing colleges, 26 (17%) knew that nurses can train at nursing colleges and private nursing colleges, 2 (1) knew that nurses can train at private nursing colleges, 7 (4%) knew that nurses can train at universities, 34 (22%) knew that nurses can train at universities and nursing colleges and 5 (3%) knew that nurses can train at the universities and private nursing colleges. Only 44 learners knew that nurses can train in all three institutions, the nursing colleges, universities and private nursing colleges. A total of 143 learners knew that nurses can train at a nursing college and 90 learners knew that nurses can train at the university. Should these learners choose the nursing career more will apply to the nursing college followed by the university. It seems that learners have adequate information about where to train as nurses. In South Africa, approximately 20 per cent of professional nurses are trained at universities and 80 per cent are trained at nursing colleges (DoH, 2013:31).

4.4 FACTORS INFLUENCING CAREER CHOICE

To determine if learners preferred to be nurses or not, Chi-square test of goodness of fit was performed. Preference for nursing as a career was not equally distributed in the population. Out of 362 learners, 205 learners indicated that they will choose nursing as a career, as indicated in Figure 21. This total of 205 include 32 learners who said they are not interested in nursing but will choose nursing as a career if their parents cannot afford the tertiary fees of their first career choice and if they did not meet the requirements of their first-choice career. 173 (69%) indicated that nursing was not their first choice and only 76 took nursing as first choice career as illustrated by Figure 4.22 below..

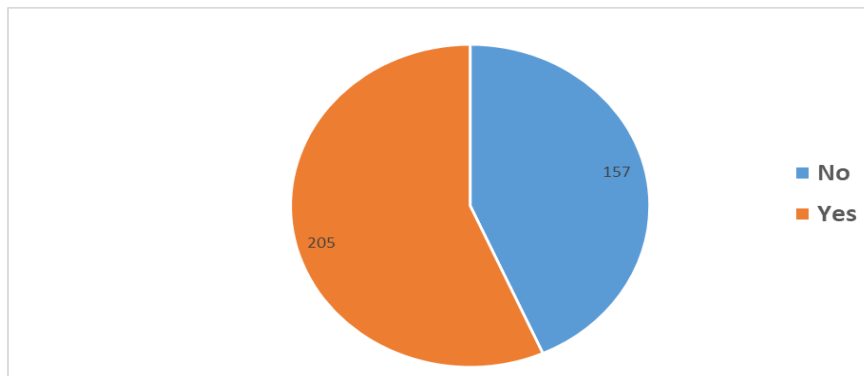


Figure 4-21 Respondents who may consider nursing career.

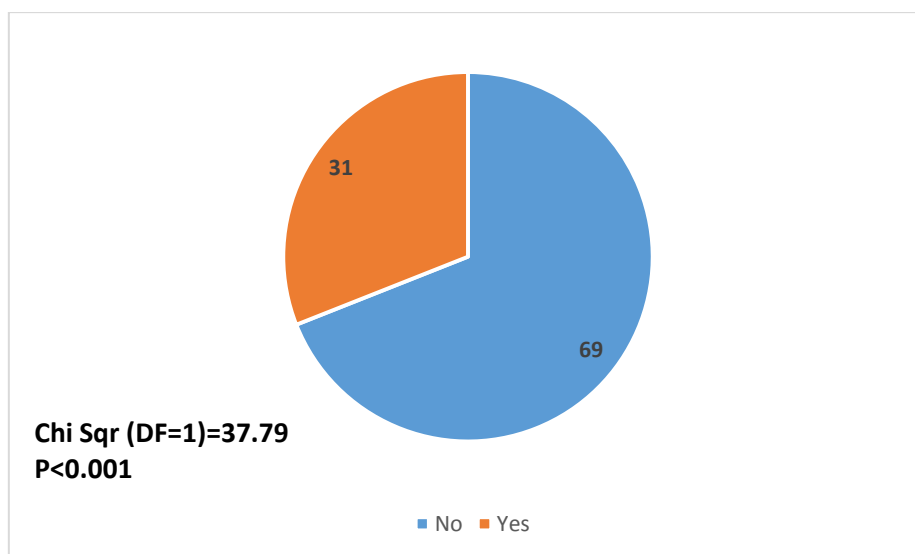


Figure 4-22 Nursing as the first choice career

4.4.1 Information on nursing career and career choice

Figure 4.23 below represents the learners who had information on nursing as a career and chose or considered nursing career. Hundred and twenty-one (121/77%) learners out of 157 learners who received information about nursing chose nursing as a career. Only (36/23%) learners did not choose nursing as a career. 77% is an indication that majority of learners considered the nursing career. This is in contrast with the findings of Neilson and Jones (2011:591) and Devi and Devi (2015:401), who found that a small number of learners identified nursing as a first career choice.

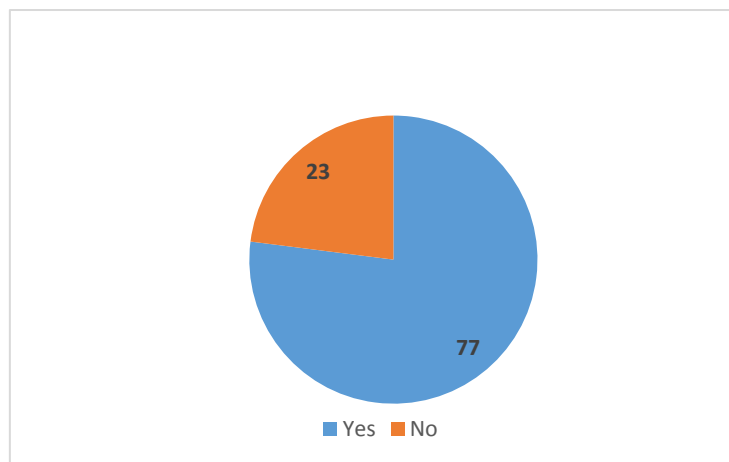


Figure 4-23 Choice of nursing among learners who received information on nursing career.

121(77%) learners out of 157 who received information about nursing choose nursing as a career. It is evident that learners who received information chose nursing as a career, as alluded by McLaughlin et al. (2009:411), who found that the provision of detailed information about the content of nursing as a career should attract learners to the profession, as learners could then make informed decisions on whether to enter the profession.

These 121 learners had different reasons for choosing nursing as a career. The reasons ranged from either having a financial crisis or that they would like to be nurses or both reasons. The reasons for choosing nursing did not differ much as illustrated in Figure 4.24 below.

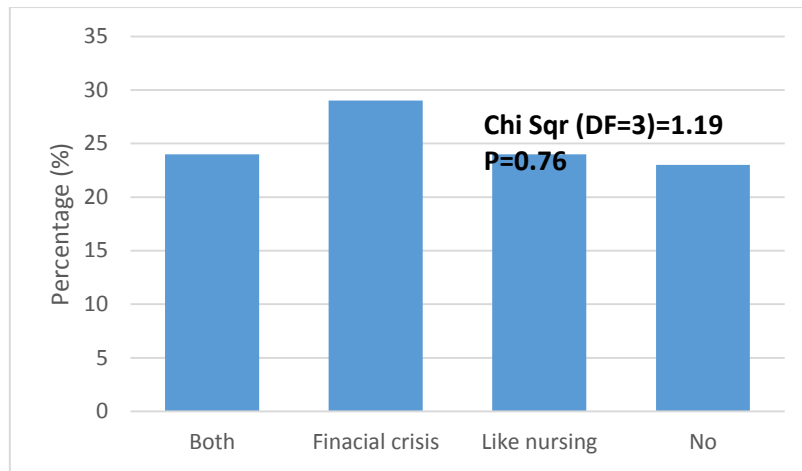


Figure 4-24 Reasons for the choice of nursing career

4.4.2 Influence by parents, teachers and the media

Figure 4.25 shows influence by parents, teachers and media on the choice of nursing career. The parents influenced 64% of the learners to choose nursing career which indicates that the parents play an important role in the children's choices. Even though the teachers and media also played a role in influencing learners career choice, the percentage contribution was 17% and 32% respectively. The study confirmed the findings of Cho et al. (2010:184), that parents influence learners in their choice of nursing as a career, similar to Başkale and Serçekus (2015:9) who also proved that parental encouragement influenced the choice of nursing as a career. Glerean et al. (2017:100) also supported the fact that parental support and the information they provided about the nursing profession influenced learners' choice of nursing.

In this study, only 17 per cent of learners has shown that teachers played a role in influencing respondents' career choice, as compared to 83 per cent who said teachers did not influence their career choice. This is in congruent with Sathekge (2014:50), that Life Orientation teachers are not typically suggesting nursing as a career to a significant number of learners.

The media did not influence most of the learners, as the study found that 68 per cent of respondents were not influenced by media.

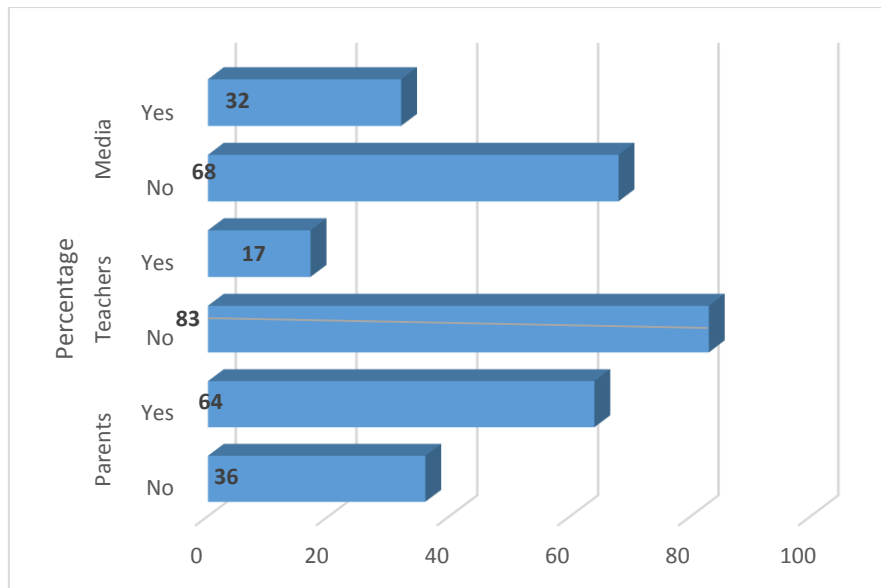


Figure 4-25 Influence by parents, teachers and media

It is evident that among the significant others, parents played a major role in influencing the choice of career amongst learners, followed by the media and teachers. This is congruent with Eman et al. (2012:88), who found that parents served as the greatest motivation to enter nursing. Lack of information on nursing among teachers might have been the reason for not influencing learners, as was established by Mbangi (2014:63), that teachers did not have information on nursing as a career and what opportunities are available. These findings are congruent with Law and Arthur (2003:30), that the influence from career teachers and friends were relatively little as compared with parents' influence.

4.4.3 Socio-economic influence

Figure 4.26 represents the major reasons for the choice of nursing as a career. Respondents could answer more than one question, hence the number of responses is more than 362. Of the 362 respondents, 249 learners chose nursing as a career. The main reasons for choosing nursing as career were that their parents could not afford the tertiary fees (160 learners out of 249;). These learners knew that they will receive a stipend when enrolled for nursing as their parents could not afford tertiary fees. This confirmed the findings of Cho et al. (2010:185), that the family household income and background of nursing students were relatively low and may be linked to

the finding that learners chose nursing for employability. This confirms that learners choose nursing for financial reasons. In their study, Başkale and Serçekus (2015:11) confirmed that low or intermediate socio-economic levels influenced the choice of nursing as a career.

Only 125 (50%) respondents always wanted to be nurses but this number is almost the same as respondents who did not indicate that they always wanted to be nurses, being 124 (50%). This is similar to the findings of Chauke (2014:128), that those who chose nursing wanted to be nurses; not because they were going to be unemployed. Halperin and Mashiach-Eizenberg (2014:1332) concurred that the next most influential factor in the choice of nursing as a career was professional interest.

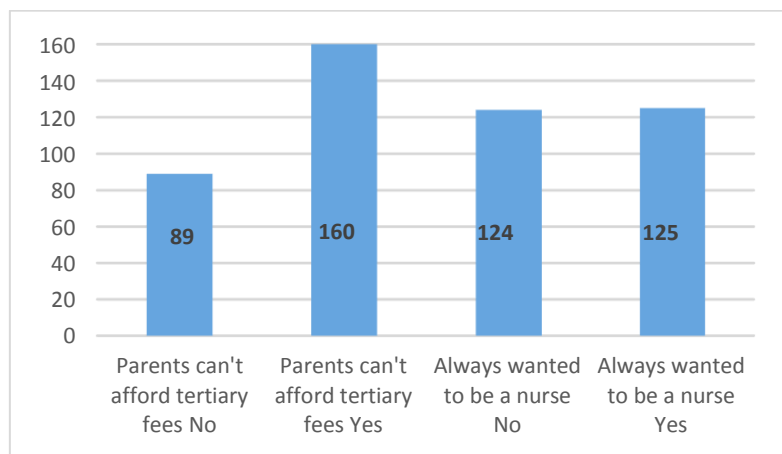


Figure 4-26 Major reasons for the choice of nursing career.

4.4.4 Other factors related to the choice of nursing career

The learners were also asked to indicate other factors that might influence the choice of nursing career as indicated in Table 4.8. Among others, nursing is my 1st choice, having passion of taking care of sick and nursing as a noble profession were indicated, These are discussed in 4.4.4.1 to 4.4.4.3 below.

Table 4-8 Other factors related to the choice of nursing career.

	Nursing if my 1st choice	Subjects choice suitable for nursing career	Not acceptable for my 1st choice	Have passion of taking care of sick people	Nursing is a noble profession	Have nursing relative	Shortage of nurses in my community	Like clean uniform	I have sick relatives
No	173	180	226	107	223	225	149	225	214
Yes	76	69	23	142	26	24	100	24	35

4.4.4.1 Nursing is my 1st choice

Table 4.9 shows that 76 of the respondents indicated that nursing was their first choice and 23 respondents will follow nursing as a career only if not accepted for their first career choice, making nursing the second choice. This is aligned to with Mooney et al. (2008:390), who identified that nursing was not the first choice of career for many students, as confirmed by Karabacak et al. (2012:540) and Liaw et al. (2016:535), that students had chosen nursing because their academic accomplishments were not good enough for admission to other programs.

4.4.4.2 Have passion of taking care of sick

Learners were afforded the opportunity to select more than one answer, hence the number of responses from the respondents being higher than 362. The reasons listed in Table 4.8 indicates that “having passion to care for sick” (142) came out as the major reason that encouraged learners to choose nursing as a career, followed by “shortage of nurses in their community” This confirmed the studies of most researchers, that altruism is the core attribute in the choice of nursing as a career.

4.4.4.3 Nursing is a noble profession

Table 4.8 illustrates that 223 respondents did not think that nursing is a noble profession versus 26 who believe that nursing is a noble profession. This confirms the study done by Eman et al. (2012:89), showing that nursing is not very well accepted

socially. This is in contrast with the findings of Baskale and Sercekus (2015:9), who found that nursing is a respected profession.

4.4.5 Image of nurses, the working environment and conditions

4.4.5.1 Nurses' attitude and how they are regarded by some community

Figure 4.27 represents the nurses regard by some communities. Two hundred and fourteen (214) (86%) of learners do not think that nurses are not highly regarded by some community, and only 35 (14%) of the respondents indicated that nurses are not highly regarded by the community. The perception that nurses are highly regarded by the community may have a positive influence in the choice of nursing as a career.

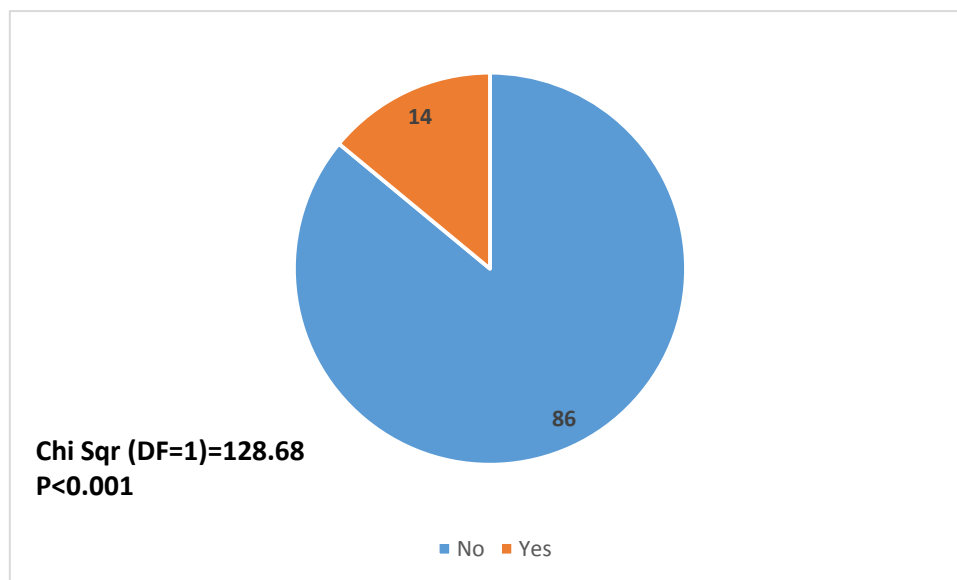


Figure 4-27 Nurses not highly regarded by some communities

Figure 4.28 below illustrates the response on the question that some nurses have a bad attitude. 155 (62%) of learners did not think that nurses have a bad attitude as compared to 94 (38%) who believe that nurses have a bad attitude as evidenced in Figure 4.28 below.

Table 4.9 shows the image of nurses, the working environment and conditions.

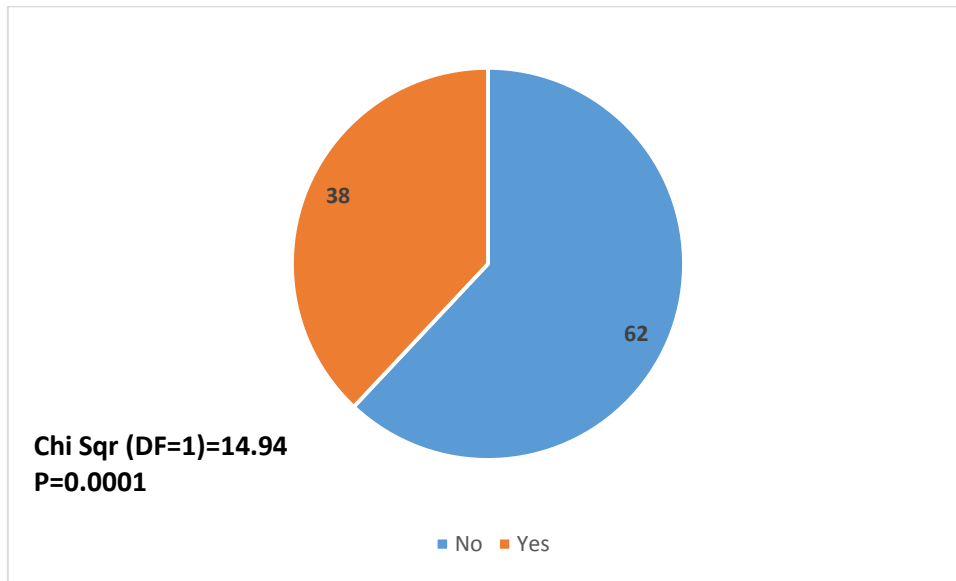


Figure 4-28 Some nurses have a bad attitude

Table 4-9 Image of nursing, working environment and conditions

	Nurses not adequately paid	Nurses care for sick people	Nurses not highly regarded by some community	Some nurses have bad attitude	Nurses work long hours	Nurses are exposed to many infectious diseases	Nurses work hard and are short staffed
No	211	89	214	155	175	204	129
Yes	38	160	35	94	74	45	120

4.4.5.2 Nurses' are adequately paid

The majority of learners (211 out of 362; Table 4.9) think that nurses are paid adequately, this might have been the reason for the majority of these learners choosing nursing as a career, as was the view of Ogunyewo et al. (2014:28). This was not supported by Mphahlele (2011:41), who found that salary was highest on the list of negative factors influencing the choice of nursing as a career, as was confirmed by Chauke (2014:124). The link of socio-economic factors and nursing as a choice of career was discussed in Section 4.4.3 above.

4.4.5.3 *Nurses work long hours, work hard and are short staffed*

Table 4.9 shows that 175 of the respondents did not agree that nurses work long hours and 120 agree that nurses work hard and are short-staffed. Of the respondents, 129 do not think that nurses work hard and are short-staffed and 74 agree that nurses work long hours. The other respondents did not respond to the question. In opposition, Glerean et al. (2017:97) and McLaughlin (2010) revealed in their studies that young people recognised the working conditions of a nurses as poor, hard-work and stressful with a high risk of injury and with inflexible working times. Glerean et al. and McLaughlin's studies were congruent with the findings of Baskale and Sercekus (2015:9), that nursing was associated with challenges, risks and 'dirty tasks' because of exposure to disease and washing patients, nightshifts and long hours.

4.4.5.4 *Nurses are exposed to many infectious diseases*

Of the 362 respondents, 204 do not believe that nurses are exposed to many infectious diseases , as evidenced by Table 4.9 above. This is in contrast with Mkhize and Nzimande (2007:17), who in their study found that nursing was amongst the least popular career choices among South African school leavers because of the fear of contracting infectious diseases. Chauke (2014:123) concurred with Mkhize and Nzimande that nurses work in an unsafe physical environment.

4.5 CONCLUSION

The aim of this study was to identify information and factors influencing Grade 12 learners' choice of nursing as a career in the Tshwane North district schools. The findings of the study were analysed, presented, described and discussed together with the literature. The findings showed that learners had inadequate information about nursing as a career and highlighted some factors influencing their career choice. The results allowed the researcher to draw conclusions and make recommendations, as discussed in the next chapter, and to draw conclusions that the learner finds themselves at the centre of LO teacher, the parents and the NEI when it comes to the provision of information of nursing as a career, as illustrated in Figure 4.29.

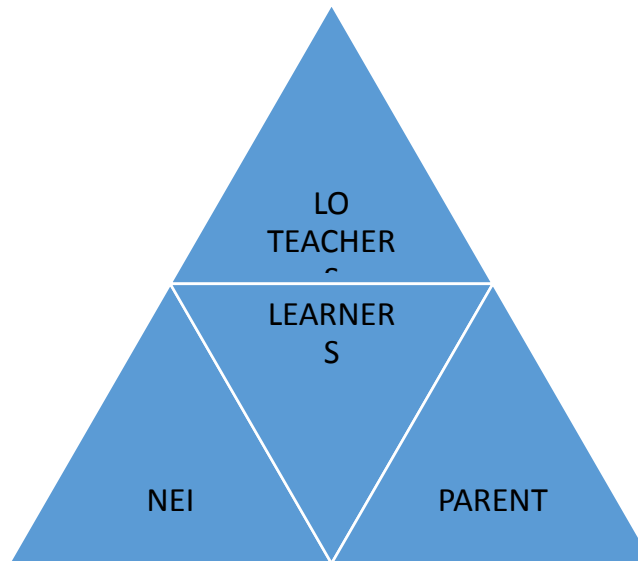


Figure 4-29 Learners at the centre of Parents, LO Teachers and NEIs in the choice of nursing career.

The following chapter will discuss the results of the study in detail and will provide insight into how a career in nursing is regarded by Grade 12 learners and the implications thereof to the future of the nursing profession.

CHAPTER 5

DISCUSSION, RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

The results of this study were presented in the previous chapter and provided a clear description of the information received by Grade 12 learners on nursing as a career and some factors that influenced them to choose or not to choose nursing as a career. This chapter discusses the summary of the main findings, limitations, recommendations and conclusion.

The study was motivated by concerns that the intake of nurses at one of the NEI in Gauteng province indicated the decline in the number of applications from Grade 12 learners as compared to the applications from learners who completed Grade 12 several years back. The NEI was unable to attract sufficient numbers of Grade 12 learners, thus there was a decline in the number of Grade 12 learners who enrolled for nursing.

Knowledge about the information learners has about nursing as a career and the factors influencing their career choice will therefore be valuable in order for the NEI (Department of Health) to assist in providing relevant information related to nursing and to manage where possible the factors influencing the learner's decision to choose or not to choose nursing.

The objectives of this study are:

- To determine and describe the information provided to Grade 12 learners on nursing as a career in the Tshwane North district schools
- To determine and describe factors influencing the choice of nursing as a career amongst Grade 12 learners in the Tshwane North district schools.

5.2 SUMMARY OF THE MAIN FINDINGS

In this study, the 77% of the learners who received information on nursing career decided to pursue nursing career in contrast to findings by Neilson and Jones, (2012:591) and Liaw et al. (2016:535), who found that nursing was not popular among school learners.

5.2.1 Role of the Department of Education

Teachers are expected to provide learners with adequate information on careers, including nursing, through Life Orientation subject. This study identified that school teachers played a lesser role in influencing the learners' career choice. The study showed that only 17% of the learners were influenced by their teachers, these findings are in contrast to Williams, Dickstein-Fischer and Emery (2017:4), who found that school counsellors recommended nursing to their students.

From this study it is therefore evident that teachers need more information on nursing as a career in order to influence learners to pursue a career in nursing. In this study, parents influenced the career choice of the learners more so than teachers.

5.2.2 Information provided by nurses

In this study, nurses played a very minimal role in the provision of information to learners as only 23% of learners were influenced by nurses. 225 learners did not have a relative who is a nurse. Although 77% of the learners chose nursing career, nurses did not play a major role in influencing learners in the choice of nursing as a career.. Nurses need to market nursing career to attract learners to the profession. Nurses can promote and market nursing as a career of choice amongst learners by making presentations at schools (Hoke, 2006:98). The exposure of learners to all nursing specialities and all areas of employment for nurses, will provide learners with a better understanding of nurses' roles. The direct contact with these professionals, may raise the level of expectations and perception of nursing as a career and thus attract learners into the nursing profession (Natan & Becker, 2010:312).

5.2.3 Information from parents and other sources

It is evident in this study that learners received information on nursing as a career from various sources. Sources of information on nursing career included: nurses, career exhibitions, relatives, teachers, mothers and the media. From the study family members provided the most information on nursing career. This study confirmed McLaughlin et al. (2010:409) that family directly or indirectly influence learners through guidance and provision of realistic picture of the nursing as career. Family members were followed by nurses and career exhibitions at 23% respectively. The study identified the variety of sources of information about nursing that are accessed, such as the internet, friends and relatives that are nurses.

5.2.4 Adequacy of information provided

Respondents seem to have inadequate information about nursing as a career as evidenced by the research results. Though 64% of the respondents indicated that the information provided was adequate, the results revealed inadequate information; 52% had limited knowledge of the duration the training required to become a professional nurse; 28% knew that nurses can train at a nursing college, private nursing college and universities; 18% knew that there are three categories of nurses.

Although 69% of the learners who received information on nursing career indicated that nurses are independent practitioners, 79% believe that nurses work under the supervision of doctors. The information learners had about nursing seemed too general, such as taking care of the sick as indicated by 160 learners, these results reveal the knowledge gap, which indicates that learners had inadequate information on nursing as a career. This study confirms the study by Achilles (2010:15) that learners were not aware of some issues concerning the profession such as; nurses being capable of independent practice, making decisions for themselves and following physicians' orders without question. Mbangi (2014:63) further established that learners were not sure of the opportunities that exist within the nursing profession, confirming the study done by Hoke (2006:98).

5.2.5 Withholding of information

More learners 195 (55%) did not receive information on nursing as a career. Career exhibitions, nurses, relatives, teachers, mothers and the media are sources of information to learners and influence their career choice. These sources should have adequate information on the nursing career and also have or portray the positive image about nursing as a career. The study revealed a lack of adequate information about nursing among the respondents, therefore it is vital that these sources provide all information on nursing as a career.

5.2.6 Image of nurses

Nurses are highly regarded as the majority 214 (86%) do not think that nurses are not highly regarded by some communities and 155 (62%) did not think that nurses have bad attitude. In contrast 223 (90%) of learners do not think that nursing is a noble profession. Karabacak et al. (2012: 541) concluded that the society perceives nurses as doctors' assistants, and this indicates that the image of the profession is affected and reflects societal prejudices.

About 125 (50%) of the respondents indicated that they always wanted to be nurses, meaning that nursing was their first choice. This is a positive result for the nursing profession as these learners might stay in the profession. The results of this study confirmed the study done by Achilles (2010:15), learners said that they would opt for nursing as their first choice career.

Altruism came out of this study, respondents knew that nurses care for sick people (160), and the 77% of the respondents chose nursing as a career. This shows that these learners are caring in nature.

5.2.7 Working environment and conditions of nursing

Two hundred and four (204) learners do not think that nurses are exposed to many infectious diseases. 204 did not think that nurses work long hours (175). The salary of nurses seemed not to be a problem to the learners, as 211 learners disagree that nurses are not adequately paid. Only 38 agreed that nurses are not adequately paid. In this study the learners seem to be comfortable with the working environment of nurses. Natan and Becker, (2010:310) found that comfortable working condition was one of the factors influencing the career choice. In the study conducted by Eman et al. (2012:86), nursing was perceived to be a hard and demanding job.

5.2.8 Major factors influencing the career choice

Much as it is good to see learners choosing nursing as a career, their main reason was that parents cannot afford tertiary fees. The socio-economic status of most of the parents of the respondents was low as evidenced by the occupation of respondents' parents. A large number (114) did not indicate their mothers' occupation and 144 (45%) of the fathers were unemployed.

While it is good to see many Grade 12 learners considering nursing as a career, the fact that their major motivation was based on financial reasons is worrying, as these learners may not stay in nursing once their financial burdens are alleviated. With the "fees must fall" campaign and the available financial support offered through the National Student Financial Aid Scheme (NSFAS), many Grade 12 learners may pursue other careers as they would not have to rely on nursing to fund their studies.

5.3 LIMITATION OF THE STUDY

Data was collected from August 2016 at the first six schools. Due to the examination period, data collection at the last two schools was collected in March 2017. There were more respondents from schools where data was collected towards the end of the year as compared to where data was collected early in the year. This affected the number of respondents from the last schools as few learners had celebrated their 18th birthday

by the time of data collection. The study was conducted at schools from the Department of Education in the Tshwane North District, the results cannot be generalised to all schools in Tshwane districts and other districts in Gauteng province. The study focused on Grade 12 learners who chose Life Science, so the survey results cannot be generalised to all Grade 12 learners in all the schools and to the Grade 10 and Grade 11 learners in the district.

Life Orientation teachers, as the custodians of career guidance at schools, were not included in the study. It would be more beneficial to get their view on the information they had about nursing as a career and the views of the learners who applied several years after completing Grade 12.

5.4 RECOMMENDATIONS

Nursing colleges supply the major output of professional nurses. It is crucial that nursing colleges attract nursing cadres who are well informed about the nursing career. This information will enable learners to make informed decisions to become nurses with the hope that, such cadres may remain in the profession. From the findings, the researcher believes that teachers, parents and the NEI play a pivotal role in the provision of information on nursing as a career to learners, as was concluded in Chapter 4, Figure 4.26. It is then recommended that:

5.4.1 Department of Education (Schools) and Department of Health (NEI)

- Nursing Education Institutions (NEIs) to form meaningful collaborations with the Department of Education, the NEI concerned and the Tshwane North District to strengthen the collaboration. The NEI must develop brochures annually for the LO teacher to assist learners with current information related to nursing as a career. The NEI must actively engage in the marketing of nursing as a career at schools and not only limit this to career exhibitions. Nurse educators must visit schools to provide information to learners.
- Nursing Education Institutions hold open days and career exhibitions to provide information and expose learners to the NEI in the Tshwane district as stated in the

National Strategic Plan on Nurse Education, Training and Practice (2012/13–2016/17).

- The NEI take part in the community out-reach programmes, as parents were found to have influence on the career choice of their children. This can be done at Churches and community halls.
- The NEI strengthen nursing ethics the curriculum and all health institutions to actively practice and adopt the Gauteng Department of Health's vision of "I Care 4 You" with the aim of improving the image of nurses.

5.4.2 Future research

- The results must be shared with the Gauteng Department of Education at a provincial level and Tshwane North District level, at the schools that took part in the study, the Gauteng Department of Health and the NEI for them to further this study.
- Future studies to be broader and include LO teachers, other Tshwane districts and learners from Grade 10 to Grade 12 to get a bigger picture on the information available about nursing as a career and factors affecting learners' choice of nursing as a career.

5.5 CONCLUSION

The aim of this study was to identify information and factors influencing Grade 12 learners' choice of nursing as a career in the Tshwane North district schools and to determine and describe the information given to Grade 12 learners on nursing as a career and factors influencing the choice of nursing as a career in the Tshwane North district schools. A quantitative approach was followed using a questionnaire to answer the two questions in this study i.e. What information is provided to Grade 12 learners on nursing as a career in the Tshwane North district schools and what are factors influencing the choice of nursing as a career amongst Grade 12 learners in the Tshwane North district schools?

In this study, it was found that that the information learners received about nursing as a career was inadequate, and the sources of the information were identified as parents, teachers, career exhibitions and the media, allowing the researcher to make recommendations to the relevant stakeholders, the NEI and the schools.

Even though the information provided to Grade 12 learners on nursing as a career, was inadequate, seventy seven (77%) indicated that they may consider the nursing career.. Respondents opted to persue nursing as a career despite the limited information and knowledge about what a career in nursing entails. Respondents had a general view of the nursing profession. With this inadequate information, the learners might drop out of nursing before completion.

Factors influencing the choice of nursing career were also identified. Socio-economic and parents were found to be more influential of learners' choice of nursing as a career. The role of LO teachers and nurses in the provision of information and in influencing learners in the choice of nursing as a career, was found to be minimal.

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LIST OF ANNEXURES

ANNEXURE A

Declaration



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Monnye Laurentia Moseithe

14362563

IDENTIFICATION OF INFORMATION AND FACTORS INFLUENCING GRADE 12 LEARNERS' CHOICE OF NURSING AS A CAREER IN THE TSHWANE NORTH DISTRICT SCHOOLS

1. I understand what plagiarism is and am aware of the University's policy in this regard.
2. I declare that this research proposal is my own original work. Where other people's work has been used (either from a printed source, Internet or any other source), this has been properly acknowledged and referenced in accordance with departmental requirements.
3. I have not used work previously produced by another student or any other person to hand in as my own.
4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.

SIGNATURE

ML Moseithe

ANNEXURE B

Participant's Information Leaflet & Informed Consent Form



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Researcher's Name : Monnye Laurentia Moseitlhe

Student Number : 14362563

Department of Health Sciences

University of Pretoria

Dear student/parent

INTRODUCTION

I am a registered Master's student in the Department of Health Sciences at the University of Pretoria and I am expected to conduct a research study as a requirement for the degree. You are invited to volunteer to participate in my research project on **Identification of Information and Factors Influencing Grade 12 Learners' Choice of Nursing as a Career in the Tshwane North District Schools**

This letter is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully understood in this leaflet, do not hesitate to ask the researcher. You should not agree to take part unless you are completely happy about what is expected of you.

The purpose of the study is **to identify information and factors influencing Grade 12 learners' choice of nursing as a career in the Tshwane North district schools.**

You will be required to complete a questionnaire. The completion of the questionnaire may take about 30 minutes. The questionnaire will be conducted during the Life Science period in class. And the questionnaire will be collected from you before you leave the class. It will be

kept in a safe place to ensure confidentiality. Please remember not to write your name on the questionnaire. The researcher will be available to help you to fill in the questionnaire

The study was submitted to the Research Ethics Committee of the University of Pretoria, Faculty of health Sciences for approval and the committee has granted written approval. The permission to conduct this study is also granted by the Gauteng Department of Educations.

Your participation in this study is voluntary and you can refuse to participate or stop at any time without stating any reason. Your withdrawal will involve no penalty or loss of benefits, but as data is anonymous, you must understand that you will not be able to recall your consent, as your information will not be traceable. There is no remuneration for participating in the study.

The implication of completing the questionnaire is that informed consent has been obtained from you. Data that may be reported in scientific journals will not include any information that identifies you as a participant in this study. As all information or data are anonymous, you must understand that you will not be able to recall your consent, as your information will not be traceable. All information during the course of this study is strictly confidential.

If you have any questions during this study, please do not hesitate to approach the researcher .I sincerely appreciate your help.

Yours truly,

Monnye Laurentia Moseithe

0826811987

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Co Supervisor

Dr SS Moloko-Phiri

Salaminah.phiri@up.ac.za

012 354 1791

LEARNER CONSENT

I hereby confirm that I have been informed by the researcher, ML Mosetlhe about the nature, conduct, benefits and risks of this study

I have also received, read and understood the letter of Information regarding the study.

I am aware that the results of the study, including personal details regarding my sex, age, date of birth will be anonymously processed into a study report.

In view of the requirements of research, I agree that the data collected during this study can be processed by the researcher. I may, at any stage, without prejudice, withdraw my consent and participation in the study.

I have had sufficient opportunity to ask questions and freely declare myself prepared to participate in the study.

I understand that significant new findings of this research which may relate to my participation will be made available to me.

Full Name of Participant

Date

Signature

The researcher herewith confirms that the above participant has been fully informed about the nature, conduct and risks of the above study.

Full Name of Researcher

Date

Signature

Full Name of Witness

Date

Signature

PARENTAL CONSENT

I hereby confirm that I have been informed by the researcher, ML Mosetlhe about the nature, conduct, benefits and risks of this study

I have also received, read and understood the letter of Information regarding the study.

I am aware that the results of the study, including personal details regarding my sex, age, date of birth will be anonymously processed into a study report.

In view of the requirements of research, I agree that the data collected during this study can be processed by the researcher.

I may, at any stage, without prejudice, withdraw my consent and participation in the study.

I have had sufficient opportunity to ask questions and freely declare myself prepared to participate in the study.

I understand that significant new findings of this research which may relate to my participation will be made available to me.

_____	_____	_____
Name of Parent	Date	Signature

The researcher herewith confirms that the above parent of participant has been fully informed about the nature, conduct and risks of the above study.

_____	_____	_____
Name of Researcher	Date	Signature

_____	_____	_____
Full Name of Witness	Date	Signature

ANNEXURE C

Questionnaire



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

QUESTIONNAIRE

There are three sections in this questionnaire. Kindly complete all three sections. Answer by making a clear tick \checkmark in the appropriate box.

SECTION A

Demographic data.

1. What is your age? Tick \checkmark in the appropriate box.

<16 yrs.	1	
17 yrs.	2	
18 yrs.	3	
19 yrs.	4	
20 yrs.	5	
21 yrs.	6	
>21 yrs.	7	

2. What is your gender? Tick \checkmark in the appropriate box.

Male	1	
Female	2	

3. What is your race? Tick \checkmark in the appropriate box.

Black	1	
Coloured	2	
White	3	
Indian	4	

4. What is your home language? Tick ✓ in the appropriate box.

English	1	
Afrikaans	2	
Setswana	3	
North Sotho	4	
South Sotho	5	
Tshivenda	6	
Tsonga	7	
Ndebele	8	
Other	9	

5. Occupation of parents or guardian. Tick ✓ in the appropriate box.

5.1 Mother/guardian.

Unemployed	1	
Factory worker	2	
Domestic Worker	3	
Professional	4	
Self employed	5	

5.2 Father/guardian.

Unemployed	1	
Factory worker	2	
Domestic Worker	3	
Professional	4	
Self employed	5	

6. In which area do you live? Tick \checkmark in the appropriate box.

City	1	<input type="checkbox"/>
Rural	2	<input type="checkbox"/>
Semi-urban	3	<input type="checkbox"/>
Informal settlement	4	<input type="checkbox"/>

SECTION B

This section is about the Information provided to the learners about the nursing career.

1. Have you ever received information about nursing as a career path? Tick \checkmark in the appropriate box.

Yes	1	<input type="checkbox"/>
No	2	<input type="checkbox"/>

If **“NO”** go to question 5, if **“YES”** answer 2, 3 and 4 then proceed from 5.

2. When was the information provided to you? Tick \checkmark in the appropriate box.

<1 yr. ago	1	<input type="checkbox"/>
1.yr ago	2	<input type="checkbox"/>
2 yrs. ago	3	<input type="checkbox"/>
3 yrs. ago	4	<input type="checkbox"/>
4 yrs. ago	5	<input type="checkbox"/>
>4yr. ago	6	<input type="checkbox"/>

3. Who provided the information? Tick ✓ in the appropriate box/es.

Teacher	1	
Nurse	2	
Mother	3	
Father	4	
Relative	5	
Media	6	
Career Exhibitions	7	

4. Were you informed about the subject choice required in nursing? Tick ✓ in the appropriate box.

Yes	1	
No	2	

5. How many categories in nursing are you aware of? Tick ✓ in the appropriate box.

One	1	
Two	2	
Three	3	
Not sure	4	

6. How long does training take before becoming a professional nurse? Tick ✓ in the appropriate box.

2 yrs.	1	
3 yrs.	2	
4 yrs.	3	
Not sure	4	

7. Can nurses be independent practitioners? Tick ✓ in the appropriate box.

Yes	1	
No.	2	

8. Do nurses work under the supervision of doctors? Tick ✓ in the appropriate box .

Yes	1	
No.	2	

9. Where can one train as a nurse? Tick ✓ in the appropriate box/es (You may tick more than one box).

University	1	
Nursing college	2	
Private nursing colleges	3	

10. Was information given to you about nursing as a career adequate enough such that you can choose nursing as a career? Tick ✓ in the appropriate box.

Yes	1	
No	2	

11. Where can nurses be employed? Tick ✓ in the appropriate box/es. (You may tick more than one box).

Clinics	1	
Hospitals	2	
Old age homes	3	
Hospices	4	
Industries	5	
Universities	6	

SECTION C1

This section is about the factors influencing the career choice. It must be completed by Grade 12 learners WHO MAY CONSIDER NURSING AS A CAREER, if not proceed to C2.

1. What are the **main** reasons for your choice of nursing as a career? You may tick ✓ in more than one box.

My parents cannot afford tertiary fees	1	
I need to start earning a living to support my family	2	
I need to earn my own money soon	3	
I have always wanted to become a nurse	4	

2 What are the other reasons for your choice of the nursing career?....You may tick ✓ in more than one box.

Nursing is my first choice of career.	1	
The subjects I have chosen in Grade 10 are suitable for nursing career	2	
I am not accepted/selected for my 1 st choice career	3	
I have a passion for taking care of sick people	4	
Nursing is a noble profession	5	
I have a relative who is a nurse	6	
There is a shortage of nurses in my community	7	
I like the clean uniform	8	
I have relatives/family who are sick	9	

3. I am aware about the following in the nursing career.... You may tick \checkmark in more than one box.

Nurses are not adequately paid/remunerated	1	
Nurses take care of very sick and dying people	2	
Nurses are not highly regarded by some of the	3	
Some nurses have a bad attitude	4	
Nurses work long hours	5	
Nurses are exposed to many infectious diseases	6	
Nurses work hard and are short staffed	7	

4. I was influenced by the following people in my life to make a career choice. Tick \checkmark in the appropriate box.

My parent	1	
My friends	2	
My teachers	3	
Media	4	
Sister/brother	5	
Cousin	6	

5. I was motivated to become a nurse because..... Tick \checkmark in the appropriate box/es.

My people talk good things about nursing	1	
I have a family/relative who is a nurse	2	
My family encouraged me to become a nurse	3	
I understand what nursing career entails	4	
I chose the relevant subjects in Grade 10	5	

SECTION C2

This section is about factors influencing the career choice. It must be completed by Grade 12 learners WHO MAY NOT CONSIDER NURSING AS A CAREER. Do not complete if you have completed section C1

If you were to become a nurse, what would be the reason for your choice? Tick ✓ in the appropriate box.

My parents can afford tertiary fees	1	
I don't need to start earning a living to support my family	2	
I don't need to earn my own money now	3	
I never wanted to become a nurse	4	

2. I will choose the nursing career only if..... Tick ✓ in the appropriate box.

I cannot meet the academic requirements for my 1 st choice career.	1	
Subjects I have chosen in Grade 10 were suitable for the nursing career	2	
I am not accepted/selected for my 1 st choice career	3	

3. I will not choose nursing career because Tick ✓ in the appropriate box/es.

I have no passion for taking care of sick people	1	
Nursing is no longer a noble profession	2	
I do not have a relative/family who is a nurse	3	
There is a shortage of nurses in my community	4	
I don't like wearing uniform to work	5	
Nurses are not adequately paid/remunerated	6	
I don't like the sight of a dying and very sick people	7	
Nursing is for the poor people	8	
Nurses have a bad attitude	9	

4. I was influenced by the following people in my life to make a career choice. Tick ✓ in the appropriate box.

My parents	1	
My friends	2	
My teachers	3	
Media	4	
Sister/brother	5	
Cousin	6	

5. I cannot work as a nurse because..... Tick ✓ in the appropriate box/es.

Nurses work long hours	1	
Nurses are exposed to many infectious diseases	2	
Nurses work hard and are short staffed	3	
Nurses are not protected and have a risk of being abused by the patients	4	

6. I am not motivated to become a nurse because..... Tick ✓ in the appropriate box/es.

People talk bad things about nurses	1	
I have never heard anything about nursing	2	
My family discouraged me to become a nurse	3	
My teachers discouraged me to choose nursing	4	
I have never asked anyone about nursing as a career	5	

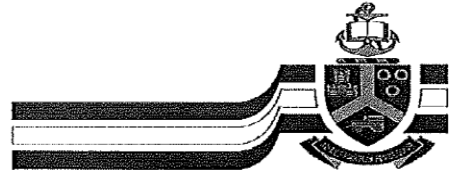
This is the end of the questionnaire. Thank you for your time.

ANNEXURE D

Approval from the Faculty of Health Sciences

2016-04-21

Faculty Ethics Committee
Faculty of Health Sciences
University of Pretoria



University of Pretoria

PO Box 677 Pretoria 0001
Republic of South Africa
<http://www.up.ac.za>
Tel: (012) 354 1980
Fax: (012) 354 1682

Office of the Chairperson
School of Health Care Sciences
Faculty of Health Sciences

To whom it may concern,

Evaluation of protocol for the following student:

Evaluation of a protocol for the following student:

Student Moseitlhe (MCur) 14362563

Title: Title: Identification of information and factors influencing grade 12 learners' choice of Nursing as a career in the Tshwane North District schools.

This letter serves to confirm that the abovementioned protocol was presented on the School of Health Care Sciences: Research Proposal Review Committee of 20 April 2016. The proposal was approved and referred to the School Academic Advisory Committee and Faculty Ethics Committee for final discussion.

Sincerely yours,

Professor JM Mothabeng
Chairperson: School Research Proposal Review Committee

ANNEXURE E

Approval from Faculty of Health Sciences Research Ethics Committee

The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

- FWA 00002567, Approved dd 22 May 2002 and Expires 20 Oct 2016.
- IRB 0000 2235 IORG0001762 Approved dd 22/04/2014 and Expires 22/04/2017.



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences Research Ethics Committee

26/05/2016

Approval Certificate New Application

Ethics Reference No.: 166/2016

Title: Identification of information and factors influencing Grade 12 learners' choice of nursing as a career in the Tshwane North district schools.

Dear Monnye Mosetlhe

The **New Application** as supported by documents specified in your cover letter dated 18/05/2016 for your research received on the 18/05/2016, was approved by the Faculty of Health Sciences Research Ethics Committee on its quorate meeting of 25/05/2016.

Please note the following about your ethics approval:

- › Ethics Approval is valid for 1 year
- Please remember to use your protocol number (**166/2016**) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, or monitor the conduct of your research.

Ethics approval is subject to the following:

- The ethics approval is conditional on the receipt of **6 monthly written Progress Reports**, and
- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

Dr R Sommers; MBChB; MMed (Int); MPharMed, PhD
Deputy Chairperson of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

☎ 012 356 3085 ✉ fhsethics@up.ac.za 🌐 <http://www.up.ac.za/healthethics>
✉ Private Bag X323, Arcadia, 0007 - Tswelopele Building Level 4-59, Gezina, Pretoria

ANNEXURE F

Approval from Gauteng Department of Education

For administrative use only:
Reference no: D2017 / 041
enquiries: Diane Bunting 011 843 6503



GAUTENG PROVINCE

EDUCATION
REPUBLIC OF SOUTH AFRICA

GDE RESEARCH APPROVAL LETTER

Date:	28 April 2016
Validity of Research Approval:	28 April 2016 to 30 September 2016
Name of Researcher:	Mosetlhe M.L.
Address of Researcher:	P.O. Box 80706; Doornpoort; Pretoria; 0017
Telephone / Fax Number/s:	012 547 2018; 082 681 1987
Email address:	tiny.mosetlhe@gauteng.gov.za
Research Topic:	Identification of information and factors affecting Grade 12 learners' choice of nursing as a career in the Tshwane North District schools
Number and type of schools:	EIGHT Secondary Schools
District/s/HO	Gauteng North

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved. A separate copy of this letter must be presented to the Principal, SGB and the relevant District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted. However participation is VOLUNTARY.

The following conditions apply to GDE research. The researcher has agreed to and may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

CONDITIONS FOR CONDUCTING RESEARCH IN GDE

1. The District/Head Office Senior Manager/s concerned, the Principal/s and the chairperson/s of the School Governing Body (SGB) must be presented with a copy of this letter.
2. The Researcher will make every effort to obtain the goodwill and co-operation of the GDE District officials, principals, SGBs, teachers, parents and learners involved. Participation is voluntary and additional remuneration will not be paid;

*filled
2016/05/03*

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Making education a societal priority


Office of the Director: Education Research and Knowledge Management ER&KM)

9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7740, Johannesburg, 2000 Tel: (011) 355 0506

3. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal and/or Director must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.
4. Research may only commence from the second week of February and must be concluded by the end of the THIRD quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.
5. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
6. It is the researcher's responsibility to obtain written consent from the SGB/s; principal/s, educator/s, parents and learners, as applicable, before commencing with research.
7. The researcher is responsible for supplying and utilizing his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institution/s, staff and/or the office/s visited for supplying such resources.
8. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research title, report or summary.
9. On completion of the study the researcher must supply the Director: Education Research and Knowledge Management, with electronic copies of the Research Report, Thesis, Dissertation as well as a Research Summary (on the GDE Summary template). Failure to submit your Research Report, Thesis, Dissertation and Research Summary on completion of your studies / project – a month after graduation or project completion - may result in permission being withheld from you and your Supervisor in future.
10. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned;
11. Should the researcher have been involved with research at a school and/or a district/head office level, the Director/s and school/s concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards


.....

Dr David Makhado

Director: Education Research and Knowledge Management

DATE: 2016/05/03
.....

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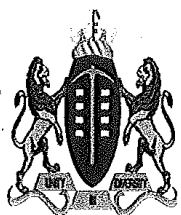
Making education a societal priority

Office of the Director: Education Research and Knowledge Management ER&KM)

9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7740, Johannesburg, 2008 Tel: (011) 355 0508

ANNEXURE G

Approval from Gauteng North District



GAUTENG PROVINCE

Department: Education
REPUBLIC OF SOUTH AFRICA

Eng: MP NTSHANGASE
Sub-Directorate: Policy and Planning
Tel: 012 5431203
Ref No: 14/1/1/2

DISTRICT MEMO NO. 245 OF 2016

TO : PRINCIPALS OF SELECTED SCHOOLS

**FROM : MS SHIRLEY MOLOBI
DISTRICT DIRECTOR**

DATE : 15 JUNE 2016

SUBJECT : APPROVAL TO CONDUCT RESEARCH

Dear Colleagues

District Tshwane North grants Ms ML Moseitlhe permission to conduct research in eight (8) selected schools in the District. A list of the schools is herewith attached. The research topic is: "**Identification of information and factors influencing learners' choice of Nursing as a career in the Tshwane North District schools**".

The researcher may conduct the research only **after contact time** so that teaching and learning activities are not disrupted. The principal must be consulted about an appropriate time suitable for the research to be conducted.

The researcher is responsible for providing and utilizing her own research resources. Participants' names must not appear in the research report and all appropriate ethical measures must be implemented to safeguard the participants.

Kindly assist and give her the necessary cooperation during the research process.

Regards


MS SHIRLEY MOLOBI
DISTRICT DIRECTOR

DISTRICT: TSHWANE NORTH
Tel: (012) 543 1479, Cell: 083 389 2868, Fax: 086 771 8195 | Email: Shirley.Molobi@gauteng.gov.za
Wonderboom Junction Mall, 1st Floor, Corner Lavender & Lavender West Road,
Wonderboom, 0066, Private Bag X945, Pretoria, 0001
www.education.gpg.gov.za | Call Centre: 0800 005 175



The eight schools selected for participation in the research project are the following:

1. Hendrik Verwoerd Hoërskool
2. Wonderboom Hoërskool
3. Memezelo Secondary School
4. Makhosini Secondary School
5. Rakgotso Secondary School
6. New Eersterus Secondary School
7. PHL Moraka Secondary School
8. Madisong Secondary School

